BIG BEND STATION

TITLE V OPERATION PERMIT REVISION APPLICATION

Prepared for:

TAMPA ELECTRIC
Tampa, Florida

Prepared by:

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

ECT No. 020535-0100

June 2002

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INTRODUCTION

Tampa Electric Company (TEC) operates four, solid fuel-fired steam boilers (Emission Units ID Nos. 001 through 004) at its Big Bend Station located at Big Bend Road, North Ruskin, Hillsborough County, Florida. In addition to the four solid fuel-fired boilers, the Big Bend Station emission sources include three combustion turbines (Emission Units ID Nos. 005 through 007) and various solid fuel material handing and storage activities (Emission Units ID Nos. 008 through 036). Operation of the Big Bend Station emission units is currently authorized by FINAL Title V Permit Revision No. 0570039-010-AV. FINAL Permit No. 0570039-010-AV was issued with an effective date of January 1, 2001, and expires on December 31, 2004.

TEC submitted an air construction permit application to the Department on May 11, 2001, requesting approval to fire coal residual in steam boiler Units 1 through 4. Coal residual is a by-product of the TEC Polk Power Station coal gasification process that is suitable as a supplemental fuel source for the Big Bend Station due to its heat content. The air construction permit application identified two additional solid fuel material handling and storage activities (Emission Units ID Nos. 037 and 038) associated with the firing of coal residual. In response, the Department issued FINAL Permit No. 0570039-012-AC on October 4, 2001, authorizing the firing of coal residual in steam boiler Units 1 through 4. FINAL Permit Number 0570039-012-AC expires on September 30, 2002.

The commencement date of the permitted firing of coal residual was January 11, 2002. Nitrogen oxides (NO_x) and carbon monoxide (CO) emissions testing of steam boiler Units 1 through 4 to evaluate the effect of firing coal residual is required by Section III., Condition No. 4 of FINAL Permit Number 0570039-012-AC. In response to this permit condition, TEC submitted an emissions testing protocol to the Department on December 13, 2001. TEC plans to complete the NO_x and CO emissions testing by October 2002. An emissions test report will be submitted to the Compliance Authority (i.e., the Hillsborough County Environmental Protection Commission [EPC]) within 45 days following completion of the last test run pursuant to Section II., Condition No. 23 of FINAL Permit Number 0570039-012-AC.

FINAL Permit Number 0570039-012-AC, Section II., Condition No. 10 requires the submittal of a Title V operation permit revision application at least 90 days prior to construction permit expiration, but no later than 180 days after commencing the permitted firing of coal residual. FINAL Permit Number 0570039-012-AC permit expires on September 30, 2002, resulting in an application submittal due date of July 2, 2002. The commencement date of the permitted firing of coal residual was January 11, 2002, resulting in an application submittal due date of July 10, 2002. Accordingly, a Title V operation permit revision application addressing the firing of coal residual must be submitted by July 2, 2002; i.e., 90 days prior to construction permit expiration.

TEC also requests that the NO_x Corrective Action Plan for Big Bend Station Unit 3 and several minor Title V operation permit formatting and typographical corrections be included in this revision to the Big Bend Station's Title V operation permit.

This permit application, using DEP Form No. 62-210.900(1), A*pplication for Air Permit – Title V Sourc*e, constitutes TEC's application to revise FINAL Title V Permit Revision No. 0570039-010-AV to: (a) address the firing of coal residual pursuant to the requirements of FINAL Permit Number 0570039-012-AC, (b) incorporate the Unit 3 NO_x Corrective Action Plan, and (c) correct several formatting and typographical errors in the latest Big Bend Station Title V operation permit revision.

Following this introduction, the Department's *Application for Air Permit – Title V Sourc*e, is provided in Appendix A. A copy of the NO_x Corrective Action Plan for Big Bend Station Unit 3 and a mark-up of FINAL Title V Permit Revision No. 0570039-010-AV are provided in Appendices B and C, respectively.

Department of
Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

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

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: **Tampa Electric Company**	
2. Site Name: **Big Bend Station**	
3. Facility Identification Number: **0570039** [ ] Unknown	
4. Facility Location: Street Address or Other Locator: **Big Bend Road** City: **North Ruskin** County: **Hillsborough** Zip Code: **33572**	
5. Relocatable Facility? [ ] Yes [✔] No	6. Existing Permitted Facility? [✔] Yes [ ] No

Application Contact

1. Name and Title of Application Contact: **Dru Latchman** **Associate Engineer – Air Programs, Environmental Affairs**
2. Application Contact Mailing Address: Organization/Firm: **Tampa Electric Company** Street Address: **6499 U.S. Highway 41 North** City: **Apollo Beach** State: **FL** Zip Code: **33572-9200**
3. Application Contact Telephone Numbers: Telephone: **(813)641 – 5034** Fax: **(813) 641-5081**

Application Processing Information (DEP Use)

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

Purpose of Application

Air Operation Permit Application

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

[ ] Initial Title V air operation permit for an existing facility which is classified as a Title V source.

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

Current construction permit number:_______________________________________

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

Current construction permit number: **0570039-012-AC**

Operation permit number to be revised: **0570039-010-AV**

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

Operation permit number to be revised/corrected:______________________________

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

Operation permit number to be revised:_____________________________________

Reason for revision:____

Air Construction Permit Application

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

[ ] Air construction permit to construct or modify one or more emissions units.

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

[ ] Air construction permit for one or more existing, but unpermitted, emissions units.

Owner/Authorized Representative or Responsible Official

1.	Name and Title of Owner/Authorized Representative or Responsible Official: **Darryl Scott, General Manager – Big Bend Station**
2.	Application Contact Mailing Address: Organization/Firm: **Tampa Electric Company** Street Address: **P.O. Box 111** City: **Tampa** State: **FL** Zip Code: **33601-0111**
3.	Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: **(813) 228-4111** Fax: **(813) 228-1864**
4.	Owner/Authorized Representative or Responsible Official Statement: *I, the undersigned, am the owner or authorized representative*(check here [✔], if so) or the responsible official (check here [ ], if so) of the Title V source addressed in this application, whichever is applicable. 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. 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 any permitted emissions unit.* [signature] 6/28/02 Signature Date

* Attach letter of authorization if not currently on file.

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**
3.	Professional Engineer Telephone Numbers: Telephone: **(352) 332-0444** Fax: **(352) 332-6722**

4. Professional Engineer Statement:

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

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

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

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

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

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

Thomas W. Davis — 6/26/02

Signature — Date

(seal)

*Attach any exception to certification statement.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
001	Unit No. 1 Steam Generator	N/A	N/A
002	Unit No. 2 Steam Generator	N/A	N/A
003	Unit No. 3 Steam Generator	N/A	N/A
004	Unit No. 4 Steam Generator	N/A	N/A
037	Coal Residual Storage Facility	N/A	N/A
038	Coal Residual Transfer System	N/A	N/A

Application Processing Fee

Check one: [ ] Attached - Amount: $ ________ [✔] Not Applicable

Note: The Big Bend Station has been issued FINAL Title V Permit No. 0570039-010-AV. An application processing fee is not required pursuant to Rule 62-4.050(4)(a)2., F.A.C.

Construction/Modification Information

1. Description of Proposed Project or Alterations: **Conditions Nos. A.2.a. and B.2.a of FINAL Title V Permit No. 0570039-010-AV limit the fuels to be burned in Big Bend Units 1 – 4 to coal, coal/petroleum coke blends, and No. 2 fuel oil. In addition to these fuels, Tampa Electric Company (TEC) requested approval to combust up to 200 tons per day of raw coal residual and up to 500 tons per day of beneficiated (or refined) coal residual generated at TEC's Polk Power Station in Big Bend Units 1 – 4. The Department approved this request in the issuance of FINAL Permit No. 0570039-012-AC on October 4, 2001.** **This permit application constitutes TEC's application to revise FINAL Title V Permit Revision No. 0570039-010-AV to: (a) address the firing of coal residual pursuant to the requirements of FINAL Permit Number 0570039-012-AC, (b) incorporate the Unit 3 NO_x Corrective Action Plan, and (c) correct several formatting and typographical errors in FINAL Title V Permit No. 0570039-010-AV.**
2. Projected or Actual Date of Commencement of Construction: **N/A**
3. Projected Date of Completion of Construction: **N/A**

Application Comment

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

<table>
<tr><td colspan="4">1. Facility UTM Coordinates:
Zone: **17** East (km): **361.9** North (km): **3,075.0**</td></tr>
<tr><td colspan="4">2. Facility Latitude/Longitude:
Latitude (DD/MM/SS): Longitude (DD/MM/SS):</td></tr>
<tr><td>3. Governmental Facility Code:
0</td><td>4. Facility Status Code:
A</td><td>5. Facility Major Group SIC Code:
49</td><td>6. Facility SIC(s):
4911</td></tr>
<tr><td colspan="4">7. Facility Comment (limit to 500 characters):</td></tr>
</table>

Facility Contact

<table>
<tr><td>1. Name and Title of Facility Contact:
Greg Benton, Environmental Coordinator</td></tr>
<tr><td>2. Facility Contact Mailing Address:
Organization/Firm: **Tampa Electric Company**
Street Address: **Big Bend Road**
City: **North Ruskin** State: **FL** Zip Code: **33572**</td></tr>
<tr><td>3. Facility Contact Telephone Numbers:
Telephone: **(813) 228-4111** Fax: **(813) 228-1864**</td></tr>
</table>

Facility Regulatory Classifications

Check all that apply:

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

List of Applicable Regulations

Facility applicable regulations previously submitted with the initial Title V permit application; reference Big Bend Station Title V Operating Permit Application, Volume II, Attachment A.	

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap lb/hour	tons/year	4. Basis for Emissions Cap	5. Pollutant Comment
NOX	**A**	**N/A**	**N/A**	**N/A**	
SO2	**A**	**63,000**	**N/A**	**62-296.405 (1)(c)2.b., F.A.C.**	**Units 1-3, 3-hr average**
SO2	**A**	**50,000**	**N/A**	**62-296.405 (1)(c)2.b., F.A.C.**	**Units 1-3, 24-hr average**
SO2	**A**	**33,000**	**N/A**	**62-204.240(1), F.A.C.**	**Units 1 and 2, 24-hr average**
SO2	**A**	**N/A**	**71,810**	**ESCPSD**	**Units 1 – 4**
CO	**A**	**N/A**	**N/A**	**N/A**	
PM10	**A**	**N/A**	**N/A**	**N/A**	
PM	**A**	**N/A**	**N/A**	**N/A**	
PM/PM10	**A**	**N/A**	**2,767**	**ESCPSD**	**Units 1 – 4**
SAM	**A**	**N/A**	**N/A**	**N/A**	
VOC	**A**	**N/A**	**N/A**	**N/A**	
PB	**B**	**N/A**	**N/A**	**N/A**	
H106	**A**	**N/A**	**N/A**	**N/A**	**Hydrochloric Acid**
H107	**A**	**N/A**	**N/A**	**N/A**	**Hydrofluoric Acid**
H133	**A**	**N/A**	**N/A**	**N/A**	**Nickel Cmpds.**
HAPS	**A**	**N/A**	**N/A**	**N/A**	**Total HAPs**

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: [ ] Attached, Document ID: [ ] Not Applicable [✔] Waiver Requested	
2. Facility Plot Plan: [ ] Attached, Document ID: [ ] Not Applicable [✔] Waiver Requested	
3. Process Flow Diagram(s): [ ] Attached, Document ID: [ ] Not Applicable [✔] Waiver Requested	
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [ ] Attached, Document ID: [ ] Not Applicable [✔] Waiver Requested	
5. Fugitive Emissions Identification: [ ] Attached, Document ID: [ ] Not Applicable [✔] Waiver Requested	
6. Supplemental Information for Construction Permit Application: [ ] Attached, Document ID: [✔] Not Applicable	
7. Supplemental Requirements Comment: **Items 1. through 5. previously submitted – reference Big Bend Station initial Title V operation permit application.**	

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities: [ ] Attached, Document ID:________ [ ] Not Applicable
9. List of Equipment/Activities Regulated under Title VI: [ ] Attached, Document ID:________ [ ] Equipment/Activities On site but Not Required to be Individually Listed [ ] Not Applicable
10. Alternative Methods of Operation: [ ] Attached, Document ID:________ [ ] Not Applicable
11. Alternative Modes of Operation (Emissions Trading): [ ] Attached, Document ID:________ [ ] Not Applicable
12. Identification of Additional Applicable Requirements: [ ] Attached, Document ID:________ [ ] Not Applicable
13. Risk Management Plan Verification: [ ] Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID:________) or previously submitted to DEP (Date and DEP Office:________________________) [ ] Plan to be submitted to CEPPO (Date required:____________________________) [✔] Not Applicable
14. Compliance Report and Plan: [✔] Attached, Document ID: **DOC. II.C.14** [ ] Not Applicable
15. Compliance Certification (Hard-copy Required): [✔] Attached, Document ID: **DOC. II.C.15** [ ] Not Applicable

Items 8. through 12. above previously submitted – reference Big Bend Station initial Title V permit application.

III. EMISSIONS UNIT INFORMATION

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

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

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. Regulated or Unregulated Emissions Unit? (Check one)

[✔] 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.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Emission unit consists of a fossil fuel steam boiler with an electrical generating capacity of 445-MW. Boiler is a wet bottom unit manufactured by Riley Stoker Corporation.

4. Emissions Unit Identification Number: [ ] No ID
ID: **001** [ ] ID unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**49**	[✔]

9. Emissions Unit Comment: (Limit to 500 Characters)

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method): **Electrostatic Precipitator (ESP)** **Flue Gas Desulfurization (FGD)**
2. Control Device or Method Code(s): **010, 042**

Emissions Unit Details

1. Package Unit: Manufacturer:	Model Number:	
2. Generator Nameplate Rating: **445** MW		
3. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Afterburner Temperature:		 °F seconds °F

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	**4,037**	mmBtu/hr		
2. Maximum Incineration Rate:		lb/hr		tons/day
3. Maximum Process or Throughput Rate:				
4. Maximum Production Rate:				
5. Requested Maximum Operating Schedule:				
	24	hours/day	**7**	days/week
	52	weeks/year	**8,760**	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):				

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

<u>List of Applicable Regulations</u>

Emission unit applicable regulations were previously submitted with the Title V permit application; reference Big Bend Station Title V Operating Permit Application, Volume II, Attachment A.

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **CS-001, CS-0W1**		2. Emission Point Type Code: **2**
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **N/A**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **001 and 002**		
5. Discharge Type Code: **V**	6. Stack Height: **490** feet	7. Exit Diameter: feet **(CS-001)** 29.0 feet (CS-0W1)
8. Exit Temperature: **294** °F **(CS-001)** **127** °F **(CS-0W1)**	9. Actual Volumetric Flow Rate: **3,146,368** acfm **(CS-001)** **2,377,871** acfm **(CS-0W1)**	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet
13. Emission Point UTM Coordinates: Zone: East (km): North (km):		
14. Emission Point Comment (limit to 200 characters): **Actual flow rates (Field 9) are for both Units 1 and 2 combined.**		

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

Segment Description and Rate: Segment 1 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Coal burned in Unit No. 1.**		
2. Source Classification Code (SCC): **1-01-002-01**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **183.5**	5. Maximum Annual Rate: **1,607,460**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **3.71**	8. Maximum % Ash: **10.7**	9. Million Btu per SCC Unit: **22**
10. Segment Comment (limit to 200 characters): **Btu per SCC unit value (Field 9) based on a nominal coal heat content of 11,000 Btu/lb.**		

Segment Description and Rate: Segment 2 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **No. 2 fuel oil burned in Unit No. 1.**		
2. Source Classification Code (SCC): **1-01-005-01**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **N/A**	5. Maximum Annual Rate: **N/A**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **139**
10. Segment Comment (limit to 200 characters): **No. 2 fuel oil burned only during startup, shutdown, flame stabilization, and during the start of a mill.**		

Segment Description and Rate: Segment 3 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Petroleum coke burned in Unit No. 1.**		
2. Source Classification Code (SCC): **1-01-008-01**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **36.7**	5. Maximum Annual Rate: **321,492**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **6.0**	8. Maximum % Ash: **0.76**	9. Million Btu per SCC Unit: **28**
10. Segment Comment (limit to 200 characters): **Maximum petcoke rates (Fields 4 and 5) based on 20% of coal rates.**		

Segment Description and Rate: Segment 4 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Raw coal residual burned in Unit No. 1.**		
2. Source Classification Code (SCC): **1-01-002-01**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: *	5. Maximum Annual Rate: **73,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **1.43**	8. Maximum % Ash: **57.7**	9. Million Btu per SCC Unit: **6.1**
10. Segment Comment (limit to 200 characters): * **Firing of raw coal residual is limited to 200 tons per day total for Units 1 – 4. Maximum annual coal residual rate (Field 5) is the total for Units 1 – 4.**		

Segment Description and Rate: Segment 5 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Beneficiated coal residual burned in Unit No. 1.**		
2. Source Classification Code (SCC): **1-01-002-01**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: *	5. Maximum Annual Rate: **182,500**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **1.45**	8. Maximum % Ash: **35.4**	9. Million Btu per SCC Unit: **17.95**
10. Segment Comment (limit to 200 characters): * **Firing of beneficiated coal residual is limited to 500 tons per day total for Units 1 – 4.** **Maximum annual coal residual rate (Field 5) is the total for Units 1 – 4.** **Sulfur, ash, and heat contents are on a dry basis.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 – NOX			**NS**
2 – CO			**NS**
3 – PM	**ESP**	**FGD**	**EL**
4 – PM10	**ESP**	**FGD**	**NS**
5 – SO2	**FGD**		**EL**
6 – VOC			**NS**
7 – H106 (HCl)			**NS**
8 – H107 (HF)			**NS**
7 – H133 (Ni)			**NS**
9 – HAPS			**NS**

TEC is not requesting any revisions to currently authorized emission limits as specified in FINAL Title V Permit No. 0570039-010-AV. The information requested by Section G of the FDEP permit application form regarding emission limitations for Unit No. 1 can be found in FINAL Title V Permit No. 0570039-010-AV.

In addition to all current emission limits, TEC requests emissions caps for Units 1-4 combined of 71,810 tons per year of SO_2 and 2,767 tons per year of PM.

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

Potential/Fugitive Emissions

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 ______ to ______ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

TEC is not requesting any revisions to currently authorized emission limits as specified in FINAL Title V Permit No. 0570039-010-AV. The information requested by Section H regarding visible emissions for Unit No. 1 can be found in FINAL Title V Permit No. 0570039-010-AV.

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

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

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

Continuous Monitoring System: Continuous Monitor —— of ——

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: [ ] Rule	[ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): **Information regarding Unit No. 1 CEMS remains unchanged from the data previously provided to the Department.**	

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 (limit to 200 characters):	

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

Supplemental Requirements

1. Process Flow Diagram [ ] Attached, Document ID: [ ] Not Applicable [✔] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID: [ ] Not Applicable [✔] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: [ ] Not Applicable [✔] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:________ [ ] Not Applicable [✔] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID: **To be provided** [ ] Previously submitted, Date:______________ [ ] Not Applicable **Note: NO_x and CO emissions testing will be completed by October 2002.**
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:________ [ ] Not Applicable [✔] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:________ [ ] Not Applicable [✔] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:________ [✔] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:________ [✔] Not Applicable
10. Supplemental Requirements Comment: **Items 1, 2, 3, 4, 6, and 7 previously submitted – reference Big Bend Station initial Title V permit application. Item 2 (for coal residual fuels) previously submitted with the coal residual air construction permit application.**

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
    [ ] Attached, Document ID:________ [ ] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
    [ ] Attached, Document ID:________ [✔] Not Applicable

13. Identification of Additional Applicable Requirements
    [ ] Attached, Document ID:________ [ ] Not Applicable

14. Compliance Assurance Monitoring Plan
    [ ] Attached, Document ID:________ [✔] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)
    [ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
    Attached, Document ID: **Previously submitted**

    [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
    Attached, Document ID:________

    [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
    Attached, Document ID:________

    [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
    Attached, Document ID:________

    [ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
    Attached, Document ID: **Previously submitted**

    [ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
    Attached, Document ID: **Previously submitted**

    [ ] Not Applicable

Items 11., 13. and 15. above previously submitted – reference Big Bend Station initial Title V permit application.

III. EMISSIONS UNIT INFORMATION

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

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

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. Regulated or Unregulated Emissions Unit? (Check one)

[✔] 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.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Emission unit consists of a fossil fuel steam boiler with an electrical generating capacity of 445-MW. Boiler is a wet bottom unit manufactured by Riley Stoker Corporation.

4. Emissions Unit Identification Number: [ ] No ID
ID: **002** [ ] ID unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**49**	[✔]

9. Emissions Unit Comment: (Limit to 500 Characters)

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method): **Electrostatic Precipitator (ESP)** **Flue Gas Desulfurization (FGD)**
2. Control Device or Method Code(s): **010, 042**

Emissions Unit Details

1. Package Unit: Manufacturer:	Model Number:
2. Generator Nameplate Rating: **445** MW	
3. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Afterburner Temperature:	 °F seconds °F

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: **3,996**	mmBtu/hr			
2. Maximum Incineration Rate:	lb/hr		tons/day	
3. Maximum Process or Throughput Rate:				
4. Maximum Production Rate:				
5. Requested Maximum Operating Schedule:				
	24	hours/day	**7**	days/week
	52	weeks/year	**8,760**	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):				

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

<u>List of Applicable Regulations</u>

Emission unit applicable regulations were previously submitted with the Title V permit application; reference Big Bend Station Title V Operating Permit Application, Volume II, Attachment A.	

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **CS-001, CS-0W1**	2. Emission Point Type Code: **2**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **N/A**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **001 and 002**		
5. Discharge Type Code: **V**	6. Stack Height: **490** feet	7. Exit Diameter: feet **(CS-001)** 29.0 feet (CS-0W1)
8. Exit Temperature: **294** °F **(CS-001)** **127** °F **(CS-0W1)**	9. Actual Volumetric Flow Rate: **3,146,368** acfm **(CS-001)** **2,377,871** acfm **(CS-0W1)**	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):		
14. Emission Point Comment (limit to 200 characters): **Actual flow rates (Field 9) are for both Units 1 and 2 combined.**		

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

Segment Description and Rate: Segment 1 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Coal burned in Unit No. 2.**		
2. Source Classification Code (SCC): **1-01-002-01**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **181.6**	5. Maximum Annual Rate: **1,591,135**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **3.71**	8. Maximum % Ash: **10.7**	9. Million Btu per SCC Unit: **22**
10. Segment Comment (limit to 200 characters): **Btu per SCC unit value (Field 9) based on a nominal coal heat content of 11,000 Btu/lb.**		

Segment Description and Rate: Segment 2 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **No. 2 fuel oil burned in Unit No. 2.**		
2. Source Classification Code (SCC): **1-01-005-01**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **N/A**	5. Maximum Annual Rate: **N/A**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **139**
10. Segment Comment (limit to 200 characters): **No. 2 fuel oil burned only during startup, shutdown, flame stabilization, and during the start of a mill.**		

Segment Description and Rate: Segment 3 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Petroleum coke burned in Unit No. 2.**		
3. Source Classification Code (SCC): **1-01-008-01**	3. SCC Units: **Tons Burned**	
6. Maximum Hourly Rate: **36.3**	7. Maximum Annual Rate: **318,227**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **6.0**	8. Maximum % Ash: **0.76**	10. Million Btu per SCC Unit: **28**
10. Segment Comment (limit to 200 characters): **Maximum petcoke rates (Fields 4 and 5) based on 20% of coal rates.**		

Segment Description and Rate: Segment 4 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Raw coal residual burned in Unit No. 2.**		
2. Source Classification Code (SCC): **1-01-002-01**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: *	5. Maximum Annual Rate: **73,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **1.43**	8. Maximum % Ash: **57.7**	9. Million Btu per SCC Unit: **6.1**
10. Segment Comment (limit to 200 characters): *** Firing of raw coal residual is limited to 200 tons per day total for Units 1 – 4. Maximum annual coal residual rate (Field 5) is the total for Units 1 – 4.**		

Segment Description and Rate: Segment 5 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Beneficiated coal residual burned in Unit No. 2.**		
2. Source Classification Code (SCC): **1-01-002-01**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: *	5. Maximum Annual Rate: **182,500**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **1.45**	8. Maximum % Ash: **35.4**	9. Million Btu per SCC Unit: **17.95**
10. Segment Comment (limit to 200 characters): * **Firing of beneficiated coal residual is limited to 500 tons per day total for Units 1 – 4. Maximum annual coal residual rate (Field 5) is the total for Units 1 – 4. Sulfur, ash, and heat contents are on a dry basis.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 – NOX			**NS**
2 – CO			**NS**
3 – PM	**ESP**	**FGD**	**EL**
4 – PM10	**ESP**	**FGD**	**NS**
5 – SO2	**FGD**		**EL**
6 – VOC			**NS**
7 – H106 (HCl)			**NS**
8 – H107 (HF)			**NS**
7 – H133 (Ni)			**NS**
9 – HAPS			**NS**

TEC is not requesting any revisions to currently authorized emission limits as specified in FINAL Title V Permit No. 0570039-010-AV. The information requested by Section G of the FDEP permit application form regarding emission limitations for Unit No. 2 can be found in FINAL Title V Permit No. 0570039-010-AV.

In addition to all current emission limits, TEC requests emission caps for Units 1-4 combined of 71,810 tons per year of SO_2 and 2,767 tons per year of PM.

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

Potential/Fugitive Emissions

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 ______ to ______ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions_____ of_____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

TEC is not requesting any revisions to currently authorized emission limits as specified in FINAL Title V Permit No. 0570039-010-AV. The information requested by Section H regarding visible emissions for Unit No. 2 can be found in FINAL Title V Permit No. 0570039-010-AV.

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

Visible Emissions Limitation: Visible Emissions Limitation —— of ——

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

Visible Emissions Limitation: Visible Emissions Limitation —— of ——

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

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

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: [ ] Rule	[ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): **Information regarding Unit No. 2 CEMS remains unchanged from the data previously provided to the Department.**	

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 (limit to 200 characters):	

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

Supplemental Requirements

1. Process Flow Diagram [ ] Attached, Document ID: [ ] Not Applicable [✔] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID: [ ] Not Applicable [✔] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: [ ] Not Applicable [✔] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:________ [ ] Not Applicable [✔] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID: **To be provided** [ ] Previously submitted, Date:________ [ ] Not Applicable **Note: NO_x and CO emissions testing will be completed by October 2002.**
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:________ [ ] Not Applicable [✔] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:________ [ ] Not Applicable [✔] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:________ [✔] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:________ [✔] Not Applicable
10. Supplemental Requirements Comment: **Items 1, 2, 3, 4, 6, and 7 previously submitted – reference Big Bend Station initial Title V permit application. Item 2 (for coal residual fuels) previously submitted with the coal residual air construction permit application.**

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation [ ] Attached, Document ID:________ [ ] Not Applicable
12. Alternative Modes of Operation (Emissions Trading) [ ] Attached, Document ID:________ [✔] Not Applicable
13. Identification of Additional Applicable Requirements [ ] Attached, Document ID:________ [ ] Not Applicable
14. Compliance Assurance Monitoring Plan [ ] Attached, Document ID:________ [✔] Not Applicable
15. Acid Rain Part Application (Hard-copy Required) [ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: **Previously submitted** [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:________ [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:________ [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:________ [ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: **Previously submitted** [ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: **Previously submitted** [ ] Not Applicable

Items 11., 13. and 15. above previously submitted – reference Big Bend Station initial Title V permit application.

III. EMISSIONS UNIT INFORMATION

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

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

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. Regulated or Unregulated Emissions Unit? (Check one)

[✔] 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.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Emission unit consists of a fossil fuel steam boiler with an electrical generating capacity of 445-MW. Boiler is a wet bottom unit manufactured by Riley Stoker Corporation.

4. Emissions Unit Identification Number: [ ] No ID
ID: **003** [ ] ID unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		49	[✔]

9. Emissions Unit Comment: (Limit to 500 Characters)

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method): **Electrostatic Precipitator (ESP)** **Flue Gas Desulfurization (FGD)**
2. Control Device or Method Code(s): **010, 042**

Emissions Unit Details

1. Package Unit: Manufacturer:	Model Number:
2. Generator Nameplate Rating: **445** MW	
3. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Afterburner Temperature:	 °F seconds °F

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: **4,115** mmBtu/hr				
2. Maximum Incineration Rate:	lb/hr		tons/day	
3. Maximum Process or Throughput Rate:				
4. Maximum Production Rate:				
5. Requested Maximum Operating Schedule:				
	24 hours/day		**7** days/week	
	52 weeks/year		**8,760** hours/year	
6. Operating Capacity/Schedule Comment (limit to 200 characters):				

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

Emission unit applicable regulations were previously submitted with the Title V permit application; reference Big Bend Station Title V Operating Permit Application, Volume II, Attachment A.

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **CS-002**	2. Emission Point Type Code: **2**

3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **N/A**
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **003 and 004 (when operating in FGD integrated mode)**

5. Discharge Type Code: **V**	6. Stack Height: **490** feet	7. Exit Diameter: **24.0** feet **(CS-002)**
8. Exit Temperature: **308** °F **(CS-002)**	9. Actual Volumetric Flow Rate: **1,389,740** acfm **(CS-002)**	10. Water Vapor: %

11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet

13. Emission Point UTM Coordinates:		
Zone:	East (km):	North (km):

14. Emission Point Comment (limit to 200 characters): **Stack data is for Unit 3, unscrubbed.**

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

Segment Description and Rate: Segment 1 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Coal burned in Unit No. 3.**		
2. Source Classification Code (SCC): **1-01-002-01**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **187.0**	5. Maximum Annual Rate: **1,638,518**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **3.71**	8. Maximum % Ash: **10.7**	9. Million Btu per SCC Unit: **22**
10. Segment Comment (limit to 200 characters): **Btu per SCC unit value (Field 9) based on a nominal coal heat content of 11,000 Btu/lb.**		

Segment Description and Rate: Segment 2 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **No. 2 fuel oil burned in Unit No. 3.**		
2. Source Classification Code (SCC): **1-01-005-01**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **N/A**	5. Maximum Annual Rate: **N/A**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **139**
10. Segment Comment (limit to 200 characters): **No. 2 fuel oil burned only during startup, shutdown, flame stabilization, and during the start of a mill.**		

Segment Description and Rate: Segment 3 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Petroleum coke burned in Unit No. 3.**		
2. Source Classification Code (SCC): **1-01-008-01**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **37.4**	5. Maximum Annual Rate: **327,704**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **6.0**	8. Maximum % Ash: **0.76**	9. Million Btu per SCC Unit: **28**
10. Segment Comment (limit to 200 characters): **Maximum petcoke rates (Fields 4 and 5) based on 20% of coal rates.**		

Segment Description and Rate: Segment 4 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Raw coal residual burned in Unit No. 3.**		
2. Source Classification Code (SCC): **1-01-002-01**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: *	5. Maximum Annual Rate: **73,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **1.43**	8. Maximum % Ash: **57.7**	9. Million Btu per SCC Unit: **6.1**
10. Segment Comment (limit to 200 characters): * **Firing of raw coal residual is limited to 200 tons per day total for Units 1 – 4. Maximum annual coal residual rate (Field 5) is the total for Units 1 – 4.**		

Segment Description and Rate: Segment 5 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Beneficiated coal residual burned in Unit No. 3.**		
2. Source Classification Code (SCC): **1-01-002-01**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: *	5. Maximum Annual Rate: **182,500**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **1.45**	8. Maximum % Ash: **35.4**	9. Million Btu per SCC Unit: **17.95**
10. Segment Comment (limit to 200 characters): * **Firing of beneficiated coal residual is limited to 500 tons per day total for Units 1 – 4.** **Maximum annual coal residual rate (Field 5) is the total for Units 1 – 4.** **Sulfur, ash, and heat contents are on a dry basis.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 – NOX			**NS**
2 – CO			**NS**
3 – PM	**ESP**	**FGD**	**EL**
4 – PM10	**ESP**	**FGD**	**NS**
5 – SO2	**FGD**		**EL**
6 – VOC			**NS**
7 – H106 (HCl)			**NS**
8 – H107 (HF)			**NS**
7 – H133 (Ni)			**NS**
8 – HAPS			**NS**

TEC is not requesting any revisions to currently authorized emission limits as specified in FINAL Title V Permit No. 0570039-010-AV. The information requested by Section G of the FDEP permit application form regarding emission limitations for Unit No. 3 can be found in FINAL Title V Permit No. 0570039-010-AV.

In addition to all current emission limits, TEC requests emission caps for Units 1-4 combined of 71,810 tons per year of SO_2 and 2,767 tons per year of PM.

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

Potential/Fugitive Emissions

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 ______ to ______ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions_____ of_____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

TEC is not requesting any revisions to currently authorized emission limits as specified in FINAL Title V Permit No. 0570039-010-AV. The information requested by Section H regarding visible emissions for Unit No. 3 can be found in FINAL Title V Permit No. 0570039-010-AV.

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

Visible Emissions Limitation: Visible Emissions Limitation ——— of ———

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

Visible Emissions Limitation: Visible Emissions Limitation ——— of ———

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

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

Continuous Monitoring System: Continuous Monitor —— of ——

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: [ ] Rule	[ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): **Information regarding Unit No. 3 CEMS remains unchanged from the data previously provided to the Department.**	

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 (limit to 200 characters):	

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

Supplemental Requirements

1. Process Flow Diagram [ ] Attached, Document ID: [ ] Not Applicable [✔] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID: [ ] Not Applicable [✔] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: [ ] Not Applicable [✔] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:________ [ ] Not Applicable [✔] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID: **To be provided** [ ] Previously submitted, Date:________________ [ ] Not Applicable **Note: NO_x and CO emissions testing will be completed by October 2002.**
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:________ [ ] Not Applicable [✔] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:________ [ ] Not Applicable [✔] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:________ [✔] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:________ [✔] Not Applicable
10. Supplemental Requirements Comment: **Items 1, 2, 3, 4, 6, and 7 previously submitted – reference Big Bend Station initial Title V permit application. Item 2 (for coal residual fuels) previously submitted with the coal residual air construction permit application.**

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation [ ] Attached, Document ID:________ [ ] Not Applicable
12. Alternative Modes of Operation (Emissions Trading) [ ] Attached, Document ID:________ [✔] Not Applicable
13. Identification of Additional Applicable Requirements [ ] Attached, Document ID:________ [ ] Not Applicable
14. Compliance Assurance Monitoring Plan [ ] Attached, Document ID:________ [✔] Not Applicable
15. Acid Rain Part Application (Hard-copy Required) [ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: **Previously submitted** [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:________ [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:________ [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:________ [ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: **Previously submitted** [ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: **Previously submitted** [ ] Not Applicable

Items 11., 13. and 15. above previously submitted – reference Big Bend Station initial Title V permit application.

III. EMISSIONS UNIT INFORMATION

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

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

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. Regulated or Unregulated Emissions Unit? (Check one)

[✔] 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.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Emission unit consists of a fossil fuel steam boiler with an electrical generating capacity of 486-MW. Boiler is a dry bottom, tangentially fired unit manufactured by Foster Wheeler Corporation.

4. Emissions Unit Identification Number: [ ] No ID
ID: **004** [ ] ID unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**49**	[✔]

9. Emissions Unit Comment: (Limit to 500 Characters)

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method): **Electrostatic Precipitator (ESP)** **Flue Gas Desulfurization (FGD)**
2. Control Device or Method Code(s): **010, 042**

Emissions Unit Details

1. Package Unit: Manufacturer:	Model Number:
2. Generator Nameplate Rating: **486** MW	
3. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Afterburner Temperature:	 °F seconds °F

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	**4,330** mmBtu/hr			
2. Maximum Incineration Rate:	lb/hr		tons/day	
3. Maximum Process or Throughput Rate:				
4. Maximum Production Rate:				
5. Requested Maximum Operating Schedule:				
	24	hours/day	**7**	days/week
	52	weeks/year	**8,760**	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):				

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

Emission unit applicable regulations were previously submitted with the Title V permit application; reference Big Bend Station Title V Operating Permit Application, Volume II, Attachment A.	

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? **CS-003**	2. Emission Point Type Code: **2**
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): **N/A**	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **003 and 004 (when operating in FGD integrated mode)**	

5. Discharge Type Code: **V**	6. Stack Height: **490** feet	7. Exit Diameter: **24.0** feet **(CS-003)**
8. Exit Temperature: **127** °F **(CS-003)**	9. Actual Volumetric Flow Rate: **2,125,325** acfm **(CS-003)**	10. Water Vapor: %

11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet
13. Emission Point UTM Coordinates: Zone: East (km): North (km):	
14. Emission Point Comment (limit to 200 characters): **Stack data is for Unit 4, scrubbed.**	

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

Segment Description and Rate: Segment 1 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Coal burned in Unit No. 4.**		
2. Source Classification Code (SCC): **1-01-002-01**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **196.8**	5. Maximum Annual Rate: **1,724,127**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **3.71**	8. Maximum % Ash: **10.7**	9. Million Btu per SCC Unit: **22**
10. Segment Comment (limit to 200 characters): **Btu per SCC unit value (Field 9) based on a nominal coal heat content of 11,000 Btu/lb.**		

Segment Description and Rate: Segment 2 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **No. 2 fuel oil burned in Unit No. 4.**		
2. Source Classification Code (SCC): **1-01-005-01**	3. SCC Units: **1,000 Gallons Burned**	
4. Maximum Hourly Rate: **N/A**	5. Maximum Annual Rate: **N/A**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.5**	8. Maximum % Ash: **0.1**	9. Million Btu per SCC Unit: **139**
10. Segment Comment (limit to 200 characters): **No. 2 fuel oil burned only during startup, shutdown, flame stabilization, and during the start of a mill.**		

Segment Description and Rate: Segment 3 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Petroleum coke burned in Unit No. 4.**		
2. Source Classification Code (SCC): **1-01-008-01**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: **39.4**	5. Maximum Annual Rate: **344,825**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **6.0**	8. Maximum % Ash: **0.76**	9. Million Btu per SCC Unit: **28**
10. Segment Comment (limit to 200 characters): **Maximum petcoke rates (Fields 4 and 5) based on 20% of coal rates.**		

Segment Description and Rate: Segment 4 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Raw coal residual burned in Unit No. 4.**		
2. Source Classification Code (SCC): **1-01-002-01**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: *	5. Maximum Annual Rate: **73,000**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **1.43**	8. Maximum % Ash: **57.7**	9. Million Btu per SCC Unit: **6.1**
10. Segment Comment (limit to 200 characters): *** Firing of raw coal residual is limited to 200 tons per day total for Units 1 – 4. Maximum annual coal residual rate (Field 5) is the total for Units 1 – 4.**		

Segment Description and Rate: Segment 5 of 5

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Beneficiated coal residual burned in Unit No. 4.**		
2. Source Classification Code (SCC): **1-01-002-01**	3. SCC Units: **Tons Burned**	
4. Maximum Hourly Rate: *	5. Maximum Annual Rate: **182,500**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **1.45**	8. Maximum % Ash: **35.4**	9. Million Btu per SCC Unit: **17.95**
10. Segment Comment (limit to 200 characters): * **Firing of beneficiated coal residual is limited to 500 tons per day total for Units 1 – 4.** **Maximum annual coal residual rate (Field 5) is the total for Units 1 – 4.** **Sulfur, ash, and heat contents are on a dry basis.**		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 – NOX			**EL**
2 – CO			**EL**
3 – PM	**ESP**	**FGD**	**EL**
4 – PM10	**ESP**	**FGD**	**NS**
5 – SO2	**FGD**		**EL**
6 – VOC			**NS**
7 – H106 (HCl)			**NS**
8 – H107 (HF)			**NS**
9 – HAPS			**NS**

TEC is not requesting any revisions to currently authorized emission limits as specified in FINAL Title V Permit No. 0570039-010-AV. The information requested by Section G of the FDEP permit application form regarding emission limitations for Unit No. 4 can be found in FINAL Title V Permit No. 0570039-010-AV.

In addition to all current emission limits, TEC requests emission caps for Units 1-4 combined of 71,810 tons per year of SO_2 and 2,767 tons per year of PM.

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

Potential/Fugitive Emissions

1. Pollutant Emitted:	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [ ]
5. Range of Estimated Fugitive Emissions: [ ] 1 [ ] 2 [ ] 3 ______ to ______ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

TEC is not requesting any revisions to currently authorized emission limits as specified in FINAL Title V Permit No. 0570039-010-AV. The information requested by Section H regarding visible emissions for Unit No. 4 can be found in FINAL Title V Permit No. 0570039-010-AV.

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

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

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

Continuous Monitoring System: Continuous Monitor —— of ——

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement: [ ] Rule	[ ] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): **Information regarding Unit No. 4 CEMS remains unchanged from the data previously provided to the Department.**	

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 (limit to 200 characters):	

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

Supplemental Requirements

1. Process Flow Diagram [ ] Attached, Document ID: [ ] Not Applicable [✔] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID: [ ] Not Applicable [✔] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: [ ] Not Applicable [✔] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:________ [ ] Not Applicable [✔] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID: **To be provided** [ ] Previously submitted, Date:________ [ ] Not Applicable **Note: NO_x and CO emissions testing will be completed by October 2002.**
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:________ [ ] Not Applicable [✔] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:________ [ ] Not Applicable [✔] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:________ [✔] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:________ [✔] Not Applicable
10. Supplemental Requirements Comment: **Items 1, 2, 3, 4, 6, and 7 previously submitted – reference Big Bend Station initial Title V permit application. Item 2 (for coal residual fuels) previously submitted with the coal residual air construction permit application.**

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation [ ] Attached, Document ID:________ [ ] Not Applicable
12. Alternative Modes of Operation (Emissions Trading) [ ] Attached, Document ID:________ [✔] Not Applicable
13. Identification of Additional Applicable Requirements [ ] Attached, Document ID:________ [ ] Not Applicable
14. Compliance Assurance Monitoring Plan [ ] Attached, Document ID:________ [✔] Not Applicable
15. Acid Rain Part Application (Hard-copy Required) [ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: **Previously submitted** [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:________ [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:________ [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:________ [ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: **Previously submitted** [ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: **Previously submitted** [ ] Not Applicable

Items 11., 13. and 15. above previously submitted – reference Big Bend Station initial Title V permit application.

III. EMISSIONS UNIT INFORMATION

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

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

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. Regulated or Unregulated Emissions Unit? (Check one)

[✔] 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.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Fugitive emissions associated with coal residual fuel storage.

4. Emissions Unit Identification Number: [ ] No ID
ID: **037** [ ] ID unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**49**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method): **Coal residual fuels are stored in an enclosed building. Building is enclosed on three sides with natural, draft ventilation provided for safety reasons. Coal residual fuels are stored entirely within the storage building.**
2. Control Device or Method Code(s): **054**

Emissions Unit Details

1. Package Unit: Manufacturer:	Model Number:
2. Generator Nameplate Rating: MW	
3. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Afterburner Temperature:	 °F seconds °F

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	mmBtu/hr			
2. Maximum Incineration Rate:	lb/hr		tons/day	
3. Maximum Process or Throughput Rate: **200 tons/hour and 255,500 tons/year**				
4. Maximum Production Rate:				
5. Requested Maximum Operating Schedule:				
	24	hours/day	**7**	days/week
	52	weeks/year	**8,760**	hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):				

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

62-297.620(4), F.A.C. (5% opacity)	
62-296.320(4)(c), F.A.C. (Reasonable precautions to prevent unconfined PM)	

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram?	2. Emission Point Type Code: **4**

3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):

N/A

4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:

N/A

5. Discharge Type Code: **F**	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: **77** °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %

11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: **0** feet

13. Emission Point UTM Coordinates:

Zone: East (km): North (km):

14. Emission Point Comment (limit to 200 characters):

Coal residual fuels are stored in an enclosed building.

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

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Storage of raw and beneficiated coal residual fuels.**		
2. Source Classification Code (SCC): **3-05-102-03**	3. SCC Units: **Tons Transferred or Handled**	
4. Maximum Hourly Rate: **200**	5. Maximum Annual Rate: **255,500**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment ____ of ____

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):	3. SCC Units:	
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 (limit to 200 characters):		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 – PM	**054**		**WP**
2 – PM10	**054**		**WP**

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

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM/PM10**	2. Total Percent Efficiency of Control:
3. Potential Emissions: lb/hour tons/year	4. Synthetically Limited? [✔]
5. Range of Estimated Fugitive Emissions: **(See comment below)** [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Moist coal residual fuels are stored in an enclosed building. PM/PM10 fugitive emissions are considered negligible.**	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

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

Visible Emissions Limitation: Visible Emissions Limitation __1__ of __1__

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: [✔] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **5** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment (limit to 200 characters): **Rule 62-297.620(4), F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

I. CONTINUOUS MONITOR INFORMATION – N/A
(Only Regulated Emissions Units 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 (limit to 200 characters):	

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 (limit to 200 characters):	

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

Supplemental Requirements

1. Process Flow Diagram [ ] Attached, Document ID: [✔] Not Applicable [ ] Waiver Requested	
2. Fuel Analysis or Specification [ ] Attached, Document ID: [✔] Not Applicable [ ] Waiver Requested	
3. Detailed Description of Control Equipment [ ] Attached, Document ID: [✔] Not Applicable [ ] Waiver Requested	
4. Description of Stack Sampling Facilities [ ] Attached, Document ID: [✔] Not Applicable [ ] Waiver Requested	
5. Compliance Test Report [ ] Attached, Document ID:________ [ ] Previously submitted, Date:________ [✔] Not Applicable	
6. Procedures for Startup and Shutdown [ ] Attached, Document ID: [✔] Not Applicable [ ] Waiver Requested	
7. Operation and Maintenance Plan [ ] Attached, Document ID: [✔] Not Applicable [ ] Waiver Requested	
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:________ [✔] Not Applicable	
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:________ [✔] Not Applicable	
10. Supplemental Requirements Comment:	

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation [ ] Attached, Document ID:________ [✔] Not Applicable
12. Alternative Modes of Operation (Emissions Trading) [ ] Attached, Document ID:________ [✔] Not Applicable
13. Identification of Additional Applicable Requirements [ ] Attached, Document ID:________ [✔] Not Applicable
14. Compliance Assurance Monitoring Plan [ ] Attached, Document ID:________ [✔] Not Applicable
15. Acid Rain Part Application (Hard-copy Required) [ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: ____________________ [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:________ [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:________ [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:________ [ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: ____________________ [ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: ____________________ [✔] Not Applicable

III. EMISSIONS UNIT INFORMATION

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

A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)

Emissions Unit Description and Status

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. Regulated or Unregulated Emissions Unit? (Check one)

[✔] 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.

3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Fugitive emissions associated with coal residual fuel transfer.

4. Emissions Unit Identification Number: ID: **038** [ ] No ID [ ] ID unknown

5. Emissions Unit Status Code:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A	**N/A**	**49**	[ ]

9. Emissions Unit Comment: (Limit to 500 Characters)

Emissions Unit Control Equipment

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

   All coal residual fuel conveyors are enclosed. New storage building dozer trap (first hopper) transfer to new coal residual fuel conveyor belt is completely enclosed. New coal residual fuel conveyor belt transfer at second hopper is enclosed to top of open hopper. Downstream conveyor belt to conveyor belt transfer is completely enclosed.

2. Control Device or Method Code(s): **054**

Emissions Unit Details

1. Package Unit:
   Manufacturer: Model Number:
2. Generator Nameplate Rating: MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

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

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	mmBtu/hr		
2. Maximum Incineration Rate:	lb/hr	tons/day	
3. Maximum Process or Throughput Rate: **200 tons/hour and 255,500 tons/year**			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:			
24	hours/day	**7**	days/week
52	weeks/year	**8,760**	hours/year
7. Operating Capacity/Schedule Comment (limit to 200 characters):			

C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)

List of Applicable Regulations

62-297.620(4), F.A.C. (5% opacity)	
62-296.320(4)(c), F.A.C. (Reasonable precautions to prevent unconfined PM)	

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

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram?	2. Emission Point Type Code: **4**

3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):

N/A

4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:

N/A

5. Discharge Type Code: **F**	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: **77** °F	9. Actual Volumetric Flow Rate: acfm	10. Water Vapor: %

11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: **0** feet

13. Emission Point UTM Coordinates:

Zone: East (km): North (km):

14. Emission Point Comment (limit to 200 characters):

All coal residual fuel conveyors and conveyor transfer points are enclosed.

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

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): **Transfer of raw and beneficiated coal residual fuels.**		
2. Source Classification Code (SCC): **3-05-102-03**	3. SCC Units: **Tons Transferred or Handled**	
4. Maximum Hourly Rate: **200**	5. Maximum Annual Rate: **255,500**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment ____ of ____

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):	3. SCC Units:	
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 (limit to 200 characters):		

F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 – PM	**054**		**WP**
2 – PM10	**054**		**WP**

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

Potential/Fugitive Emissions

1. Pollutant Emitted: **PM/PM10**	2. Total Percent Efficiency of Control:	
3. Potential Emissions: lb/hour tons/year		4. Synthetically Limited? [✔]
5. Range of Estimated Fugitive Emissions: **(See comment below)** [ ] 1 [ ] 2 [ ] 3 _____ to _____ tons/year		
6. Emission Factor: Reference:		7. Emissions Method Code:
8. Calculation of Emissions (limit to 600 characters):		
10. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): **Moist coal residual fuel conveyors and transfer points are enclosed. PM/PM10 fugitive emissions are considered negligible.**		

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

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

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE05**	2. Basis for Allowable Opacity: [✔] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: **5** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **EPA Reference Method 9**	
5. Visible Emissions Comment (limit to 200 characters): **Rule 62-297.620(4), F.A.C.**	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [ ] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

I. CONTINUOUS MONITOR INFORMATION – N/A
(Only Regulated Emissions Units 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 (limit to 200 characters):	

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 (limit to 200 characters):	

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

Supplemental Requirements

1. Process Flow Diagram [ ] Attached, Document ID: [✔] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID: [✔] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID: [✔] Not Applicable [ ] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID: [✔] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:________________ [ ] Previously submitted, Date:________________ [✔] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID: [✔] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID: [✔] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:________ [✔] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:________ [✔] Not Applicable
10. Supplemental Requirements Comment:

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
    [ ] Attached, Document ID:________ [✔] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
    [ ] Attached, Document ID:________ [✔] Not Applicable

13. Identification of Additional Applicable Requirements
    [ ] Attached, Document ID:________ [✔] Not Applicable

14. Compliance Assurance Monitoring Plan
    [ ] Attached, Document ID:________ [✔] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

    [ ] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
    Attached, Document ID: ____________________

    [ ] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
    Attached, Document ID:________

    [ ] New Unit Exemption (Form No. 62-210.900(1)(a)2.)
    Attached, Document ID:________

    [ ] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
    Attached, Document ID:________

    [ ] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
    Attached, Document ID: ____________________

    [ ] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
    Attached, Document ID: ____________________

    [✔] Not Applicable

DOC.II.C.14 AND DOC.II.C.15

COMPLIANCE REPORT AND PLAN
COMPLIANCE CERTIFICATION

COMPLIANCE REPORT, PLAN, AND CERTIFICATION

1. Compliance Report and Plan

Appendix A of the initial Big Bend Station Title V operation permit application, FINAL Permit No. 0570039-012-AC, and FINAL Title V Permit Revision No. 0570039-010-AV identify 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 consistent with FDEP Rule 62-213.440(3)(a)2., 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.

Darryl Scott
General Manager – Big Bend Station

Date

APPENDIX B

NO_x CORRECTIVE ACTION PLAN
BIG BEND STATION UNIT 3

Tampa Electric Company

TECO
TAMPA ELECTRIC

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

November 12, 2001

1.0 Summary

From December 23, 2000 through December 31,2000, Tampa Electric Company's (TEC's) Big Bend Station Unit 3 exceeded its 30-day rolling average (nitrogen oxides) NO_x emission limit of 0.70 pounds per million BTU (lb/MMBtu), as described in Specific Condition No. A10 of Title V permit number 0570039-002-AV. TEC notified the Environmental Protection Commission of Hillsborough County (EPC) on December 29, 2000, of this occurrence. A follow-up letter was sent to the EPC on January 5, 2001, describing the event. On January 26, 2001, TEC received a warning notice from EPC, which requested a more detailed description of the events that caused the emissions violation. TEC responded with a letter dated February 5, 2001, that summarized the incident. On May 9, 2001, TEC received a Notice of Intent to Initiate Enforcement from EPC and on October 15, 2001 TEC executed Consent Order, EPC Case No. 00-1223CCG0039 with the EPC. Pursuant to the requirements set forth in the Consent Order, TEC agreed to pay a fine in the amount of $16,875.00 and submit a Corrective Action Plan (CAP) for the aforementioned NO_x exceedance. TEC understands that with the submittal of this document, the Consent Order condition requiring the development and submittal of a CAP will be satisfied.

2.0 Introduction

Big Bend Unit 3 is a fossil fuel fired steam boiler generating unit rated at 4,115 MMBtu/hour with an electrical generating capacity of 445 MW. It is a "wet" bottom utility boiler manufactured by Riley Stoker Corporation. This unit may be fired on coal, a coal/residual fuel blend containing a maximum of 5.0% residual fuel by weight, a coal/petroleum coke blend consisting of a maximum of 20.0% petroleum coke by weight, or a coal/residual fuel/petcoke blend containing a maximum of 5.0% residual fuel and a maximum of 20.0% petcoke, by weight. Operation of this unit may include diverting all of the flue gas into the existing Big Bend Unit No. 4 flue gas desulfurization (FGD) system for sulfur dioxide emissions control. Sulfur dioxide emissions that are generated and not diverted through the Unit No. 4 FGD system are uncontrolled. However, Consent Decree number 99-2524 CIV-T-23F limits this method of operation to no more than 30 days per year. Particulate matter emissions generated during the operation of the unit are controlled by a dry electrostatic precipitator (ESP) manufactured by Research-Cottrell, Inc.

The facility is currently permitted under the Title V program administered by the Florida Department of Environmental Protection (FDEP), Permit No. 0570037-002-AV. Specific Condition No. A.10 of the current Title V Permit limits the NO_x emissions to 0.70 lb/MMBtu heat input based on a 30 day rolling average.

Paragraph 5 of Consent Order, EPC Case No. 00-1223CCG0039 executed on October 15, 2001, between EPC and TEC requires TEC to develop, implement, and submit a CAP to prevent future NO_x emissions exceedances from Big Bend Unit 3. Pursuant to the requirements and intent of the Consent Order, TEC has developed a CAP, which is discussed in the following section.

3.0 Corrective Action Plan

Development of this CAP was initiated immediately after the Big Bend Unit 3 NO_x exceedance was discovered, and initial corrective actions were implemented. Big Bend also developed long-term solutions and continues to evaluate additional measures to ensure compliance with the NO_x limitations. Below is a description of each implemented action to support immediate and continued reduction of NO_x emissions.

3.1. Procedure Review & Update

Procedure Review – Immediately following the event, TEC provided refresher training regarding procedures for all operators to ensure they understand their environmental role within TEC. In addition, Big Bend Station personnel were clearly assigned responsibility to track and monitor NO_x levels.

Control Room Display and Placard Installation – At the time of the event, the NO_x emission rate was already displayed on the screen in the control room. However, to heighten awareness, a warning placard was installed in the control room. This display is now monitored 24 hours a day by the control room operators. Additionally, an alarm has been installed in the control room to alert the operators when the instantaneous NO_x emission levels reach 0.7 lb/MMBtu. This provides the operations personnel time to adjust operating parameters to lower NO_x before reaching a 30-day average exceedance.

3.2. Emission Data Analysis

Daily Summary – Prior to this event, TEC had established a report, which calculates the average NO_x emission rate on a daily basis. This data is obtained directly form the continuous emissions monitoring system (CEMs). TEC also created a spreadsheet which tracks these daily averages and provides a weighted 30-day rolling average NO_x emission limit. Since this event, the plant has assigned specific personnel and back-ups to maintain and check this information.

Trending – To avoid future events, an interactive spreadsheet program was developed and implemented to calculate the average NO_x emission rate on a monthly basis, using actual and forecast data inputs. This interactive program can be used to trend and predict NO_x emission levels resulting from continued operations of the unit. Based on event warning criteria and the daily summaries, when the unit reaches or approaches an instantaneous NO_x emission level of 0.7 lb/MMBtu operational adjustments can be made to maintain compliance. This program can also be used to predict what impact forecast load profiles can have on the 30-day rolling average NO_x emission limit and allow adjustments to be made in advance to ensure compliance.

3.3. Operational Enhancements

Slag Removal – As a corrective action to this event, TEC has implemented more selective and frequent slag removal to reduce NO_x emissions formation from the unit. NO_x formation and the boiler thermal performance are directly effected by the operation of a unit's sootblowers. During normal operations, excessive slag can build up in the radiant section of the boiler and reduce the heat flux in that area. This results in higher peak flame temperatures, which is directly related to the amount of thermal NO_x generated. The current control philosophy uses sequential based schemes whose frequency is dictated by the control room operator. Careful and selective sootblowing of the furnace optimizes heat transfer to the various sections to achieve maximum boiler efficiency. This produces lower peak flame temperatures, which results in reduced NO_x formation.

4.0 Conclusion

TEC has taken great strides to prevent NO_x emissions exceedances for Big Bend Station's Unit 3 and has been extremely successful thus far. Through the immediate corrective actions taken by plant personnel, NO_x emissions from Unit 3 were returned to below permitted levels in a short period of time after the exceedance was discovered. In addition, Unit 3 has continued to operate in compliance with permitted NO_x emissions since the original exceedance.

TEC is evaluating further NO_x reductions from Big Bend Unit 3 through the implementation of the Early NO_x Reduction Program as required by the Consent Decree entered into between the United States of America and TEC on October 4, 2000. Specifically, paragraph 35 of the document requires that TEC spend up to $3 million with the goal of reducing NO_x emissions from Units 1 and 2 by 30% below 1998 levels and from Unit 3 by 15% below 1998 levels. TEC and U.S. Environmental Protection Agency (EPA) agree that in 1998, the NO_x emission rate from Unit 3 was 0.57 lb/MMBtu. Thus far, TEC has installed low NO_x burners on Unit 1, a neural network on Unit 2, and is evaluating options for Unit 3. No later than January 1, 2002, TEC will submit a report to EPA detailing its plans for achieving early NO_x reductions from Unit 3. No later than December 31, 2002, the Unit 3 NO_x reduction strategy identified in the above report should be implemented.

APPENDIX C

MARK-UP OF CURRENT TITLE V
OPERATION PERMIT NO. 0570039-010-AV

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

Title V Air Operation Permit Revision
FINAL Permit Revision No.: 0570039-010-AV

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

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

Telephone: 850/488-0114
Fax: 850/922-6979

Compliance Authority:
Environmental Protection Commission
of Hillsborough County
1410 North 21 Street
Tampa, Florida 33605
Telephone: 813/272-5530
Fax: 813/272-5605

Title V Air Operation Permit
FINAL Permit Revision No.: 0570039-010-AV

Table of Contents

Section	Page Number

Permittee:
Tampa Electric Company
P.O. Box 111
Tampa, Florida 33601-0111

FINAL Permit Revision No.: 0570039-010-AV
Facility ID No.: 0570039
SIC Nos.: 49, 4911
Project: Initial Title V Air Operation Permit

This permit revision is for the purpose of changing several Specific Conditions established in the initial Title V Air Operation Permit, No. 0570039-002-AV, and based on air construction permitting action No. 0570039-009-AC. This permit is for the operation of the Tampa Electric Company (TEC) Big Bend Station. This facility is located at Big Bend Road, North Ruskin, Hillsborough County; UTM Coordinates: Zone 17, 361.9 km East and 3075.0 km North; Latitude: 27° 47' 36" North and Longitude: 82° 24' 11" West.

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, 62-213 and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
APPENDIX TV-3, TITLE V CONDITIONS (version dated 04/30/99)
APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)
TABLE 297.310-1, CALIBRATION SCHEDULE (version dated 10/07/96)
FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSIONS AND MONITORING SYSTEM PERFORMANCE REPORT (version dated 7/96)
DOCUMENT III.I.6 - PROCEDURES FOR STARTUP AND SHUTDOWN UNITS 1 - 4
DOCUMENT III.I.7 - OPERATION AND MAINTENANCE PLAN (version dated 7/18/97)
40 CFR 60 Subpart A – General Provisions
40 CFR 63 Subpart A - General Provisions modified for Subpart II
40 CFR 63 Subpart II – § 63.782 Definitions
40 CFR 63 Subpart II - Figure 1. Flow diagram of compliance procedures
40 CFR 63 Subpart II - TABLE 2 VOLATILE ORGANIC HAP (VOHAP) LIMITS FOR MARINE COATINGS
40 CFR 63 Subpart II - TABLE 3 SUMMARY OF RECORDKEEPING & REPORTING REQUIREMENTS
40 CFR 63 Subpart II - APPENDIX A VOC DATA SHEET
40 CFR 63 Subpart II - APPENDIX B
DEP Form No. 62-210.900(1)(a), version 07/01/95, received 12/26/95 (signed 12/19/95).
Consent Final Judgement (DEP vs. TEC) dated December 6, 1999
Phase II NOx Compliance Plan received December 22, 1999
Phase II NOx Averaging Plan received December 22, 1999
Consent Decree (U.S. vs. TEC) dated February 29, 2000; amended October 4, 2000.

Effective Date: January 1, 2001
Revision Effective Date: July 24, 2001
Renewal Application Due Date: July 5, 2004
Expiration Date: December 31, 2004

Howard L. Rhodes, Director,
Division of Air Resources Management

HLR/CLP

Section I. Facility Information.

Subsection A. Facility Description.

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

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

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

Overview of the facility's operation:

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

From the solid fuel yard, the solid fuel is conveyed to the tripper room where 2 trippers bunker the solid fuels into 4 solid fuel bunkers. Each unit has its own respective bunker. Solid fuel samples are taken every 15 minutes during bunking, and composited for analysis. From the bunkers, the solid fuel is gravity fed into 14 crushers, and then gravity fed into the boilers. There are 3 tall crushers, each for Unit Nos. 1 – 3, and 5 bowl crushers for Unit No. 4. From the crushers, the solid fuel is pneumatically fed into classifiers, two for each crusher for a total of 28 classifiers, and then into the respective boilers.

PM emissions from Boiler Nos. 1-3 are controlled by individual Electrostatic Precipitators (ESPs). Unit No. 4 PM emissions are controlled by an ESP, and the SO2 emissions are controlled by an FGD scrubber system. When Unit No. 3 burns petroleum coke, the exhaust gas, following particulate matter removal by the unit's ESP, will be routed to the inlet of the Unit No. 4 flue gas desulfurization (FGD) system scrubber. In this integrated mode, Unit No. 3 will meet the same sulfur dioxide emissions limitations as Unit No. 4. The FGD scrubber will continue to treat the exhaust gas from Unit No. 4. The FGD scrubber outlet stream, consisting of the combined Unit No. 3 and Unit No. 4 treated exhaust, will then be split and discharged through stacks CS002 and CS003.

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

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

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

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

E.U. ID No.	Brief Description
-001	Unit No. 1 Steam Generator
-002	Unit No. 2 Steam Generator
-003	Unit No. 3 Steam Generator
-004	Unit No. 4 Steam Generator
-005	Combustion Turbine No. 2
-006	Combustion Turbine No. 3
-007	Combustion Turbine No. 1
-008	Fly Ash Silo No. 1 Baghouse
-018	Flyash Silo No. 1 Truck Loadout
-009	Fly Ash Silo No. 2 Baghouse
-019	Flyash Silo No. 2 Truck Loadout
-026	Fly Ash Handling and Storage Fugitive Emissions (all except silos)
-014	Fly Ash Silo No. 3 Baghouse
-027	Fly Ash Silo No. 3 Truck Loadout
-028	Fly Ash Handling System Fugitive Emissions
-011	Truck Unloading of Limestone
-012	Limestone Silo A with one baghouse and one backup baghouse
-013	Limestone Silo B with one baghouse and one backup baghouse
-023	Limestone Handling Conveyor LB to Conveyor LC with baghouse Limestone Handling Conveyor LD to Conveyor LE with baghouse

E.U. ID No. **Subsection B. Summary of Emissions Unit ID Nos. and Brief Descriptions. (continued)**

E.U. ID No.	Brief Description
~~-024~~	~~Limestone Handling Conveyor LE to South Storage Silo with baghouse~~ ~~Limestone Handling Conveyor LE to North Storage Silo with baghouse~~
-025	Limestone Storage and Handling Fugitive Emissions
-010	Solid Fuel Yard, Fugitive Emissions
-029	Cyclone collectors for fuel blending bins (FH-032 and FH-035)
-030	Cyclone collectors for fuel crushers (FH-048 and FH-049)
~~-031~~	~~Cyclone collectors for bunkers (FH-059 through FH-062)~~
-015	Unit No. 1 Coal Bunker
-016	Unit No. 2 Coal Bunker
-017	Unit No. 3 Coal Bunker
-032	Surface coating of miscellaneous metal parts
-033	Abrasive Blast Booth with baghouse
-034	Abrasive Blast Media Storage with baghouse
-035	Surface coating of ships
-020	**Drops from limestone handling conveyors LE, LF, and LG and silo C belt feeder with baghouse**
-021	**Silo C with one baghouse**
-022	**Lime silo with one baghouse for the waste water treatment plant for the chloride bleed stream**
-036	Unregulated Emissions Units and/or Activities

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

Subsection C. Relevant Documents.

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

<u>These documents are provided to the permittee for information purposes only:</u>
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History

<u>These documents are on file with the permitting authority:</u>
Phase I Acid Rain Permit dated July 15,1994
Initial Title V Permit Application received June 14, 1996
Additional Information Request dated February 13, 1997
Letter dated June 27, 1997, changing the Designated Representative
Additional Information Response received July 21, 1997
Additional Information Response received July 21, 1997
Proposed Compliance Plan dated December 30, 1998, requesting additional SO_2 limits

These documents are on file with the permitting authority (continued):

Memo from Power Plant Siting dated February 23, 1999, to confirm COC correction.
FDEP letter dated December 23, 1999 Allowing Discontinuance of TSP/SO_2 Ambient Monitoring
Additional Information received January 17, 2000
Plant diagrams as provided in the Title V Permit application and additional information
TEC comments dated June 23, 2000 and July 5, 2000 on the 2nd Revised DRAFT permit
USEPA Region 4 objections and comments letter dated September 5, 2000.
FDEP letter dated December 1, 2000 resolving USEPA Region 4 objections and comments.
FDEP letter dated December 14, 2000 clarifying December 1, 2000 resolution letter.
TEC request received February 7, 2001 to revise vanadium limitation wording in PSD-FL-040
TEC request received February 16, 2001 to revise vanadium limitation wording in Title V permit
NO_x Corrective Action Plan

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-3, TITLE V CONDITIONS, is a part of this permit.
{Permitting note: APPENDIX TV-3, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

2. Not federally enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard.
Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]
{Permitting Note: Although the Permittee is not required to perform a visible emissions compliance test to demonstrate compliance with the facility-wide limitations annually or before renewal, if the Department believes that the general visible emissions standard is being violated, the Department may require that the owner or operator perform a visible emissions compliance test per Chapter 62-297.310(7)(b), Special Compliance Tests. In addition, Department personnel who are certified to perform visible emissions tests may determine compliance with the general visible emissions standard.}

4. Prevention of Accidental Releases (Section 112(r) of CAA). [40 CFR 68]
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.

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

6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]

7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1)(a), F.A.C.]

8. The Permittee shall take reasonable precautions to prevent emissions of unconfined particulate matter at this facility.
[Rule 62-296.320(4)(c)2., F.A.C.]
{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4. F.A.C. (condition 58. of APPENDIX TV-3, TITLE V CONDITIONS.)}

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

10. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)**(a)2.**, F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year **using DEP form No. 62-213.900(7), F.A.C.**
[Rule 62-**213.440(3) and 62-213.900,** F.A.C.]

11. The Consent Final Judgement (DEP vs. TEC) dated December 6, 1999; and the Consent Decree (U.S. vs. TEC) dated February 29, 2000, including the October 4, 2000 amendment; are attached hereto and made a part of this permit. The permittee shall comply with the Consent Final Judgement and the Consent Decree. Wherever the Consent Decree conflicts with this permit the terms and conditions of the Consent Decree control. Upon expiration of the Consent Decree the Title V permit shall be modified to incorporate any terms and conditions that are deemed necessary by the permitting authority for the continued operation of the facility.
[Rules 62-4.070(3)&(5) and 62-213.440, F.A.C.]

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

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

Environmental Protection Commission
of Hillsborough County
1410 North 21 Street
Tampa, Florida 33605
Telephone: 813/272-5530
Fax: 813/272-5605

b. The permittee shall provide timely notification to the Environmental Protection Commission of Hillsborough County prior to implementing any changes that may result in a modification to this permit. The changes may include, but are not limited to, the following, and may also require prior authorization before implementation:

1. Alteration or replacement of any equipment* or parameter listed in the Facility or Subsection descriptions.
2. Installation or addition of any equipment* which is a source of air pollution.
3. Any changes in the method of operation, raw materials, products of fuels.

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

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

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

Section III. Regulated Emissions Units Conditions.

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

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

Descriptions. Unit No. 1 is a fossil fuel fired steam boiler generating unit rated at 4037 MMBtu/hour with an electrical generating capacity of 445 MW. It is a "wet" bottom utility boiler manufactured by Riley Stoker Corporation. This unit may be fired on coal, ~~or a~~ coal/petroleum coke blend, residual fuel, or beneficiated fuel consisting of a maximum of 20.0 percent petroleum coke by weight. Unit No. 1 began commercial operation in 1970.

Unit No. 2 is a fossil fuel fired steam boiler generating unit rated at 3996 MMBtu/hour with an electrical generating capacity of 445 MW. It is a "wet" bottom utility boiler manufactured by Riley Stoker Corporation. This unit may be fired on coal, ~~or a~~ coal/petroleum coke blend, residual fuel, or beneficiated fuel consisting of a maximum of 20.0 percent petroleum coke by weight. Unit No. 2 began commercial operation in 1973.

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

Unit No. 3 is a fossil fuel fired steam boiler generating unit rated at 4115 MMBtu/hour with an electrical generating capacity of 445 MW. It is a "wet" bottom utility boiler manufactured by Riley Stoker Corporation. This unit may be fired on coal, ~~or a~~ coal/petroleum coke blend, residual fuel, or beneficiated fuel consisting of a maximum of 20.0 percent petroleum coke by weight. Operation of this unit may include diverting all of the flue gas into the existing Big Bend Unit No. 4 flue gas desulfurization (FGD) system for sulfur dioxide emission reduction. Sulfur dioxide emissions that are generated and not diverted through the Unit No. 4 FGD system are uncontrolled. Particulate matter emissions generated during the operation of the unit are controlled by a dry electrostatic precipitator (ESP) manufactured by Research-Cottrell, Inc. The ESP control efficiency is 99.7%. Unit No. 3 began commercial operation in 1976.

{Permitting note: Units No. 1, No. 2, and No. 3 are regulated under the federal Acid Rain Program for Phase II SO_2 and NO_x, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; and regulated under 62-296.405, F.A.C. These units were also formerly regulated under the federal Acid Rain Program as Phase I SO_2 substitution units.}

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

ESSENTIAL POTENTIAL TO EMIT (PTE) PARAMETERS

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

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

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

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

A.2. Methods of Operation - Fuels.

a. Normal operation~~: The~~: The only fuels allowed to be burned in Units Nos. 1, 2, and 3 is coal or a coal/petroleum coke blend containing a maximum of 20.0% petroleum coke by weight. **The vanadium content of the petroleum coke fired shall not exceed 2660 ppm. The ash content of the petroleum coke fired shall not exceed 0.76% by weight on a dry basis. The permittee shall maintain and submit to the Department, and to the Environmental Protection Commission of Hillsborough County, on an annual basis for the years 2001, 2002, 2003, 2004, and 2005 data demonstrating that removal of the sulfur content limit and the revision of the vanadium content limit in the petroleum coke fired did not result in a significant increase in the representative actual annual emissions of any regulated pollutant.**

b. Other operation: In addition to the fuels allowed to be burned during normal operation, each unit may also burn new No. 2 fuel during startup, shutdown, flame stabilization, and during the start of a mill on an already operating unit. Evaporation of up to 150,000 gallons per year, total at the facility, is allowed of non-hazardous, but potentially HAP-emitting, mineral acid solution boiler chemical cleaning waste which was generated on site.

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

{Permitting note: "Flame stabilization" is defined as the use of new No. 2 fuel oil to stabilize a flame during times of unexpected poor coal quality or equipment failure such as coal piping pluggage. Flame stabilization due to poor coal quality occurs when coal is wet or does not provide the necessary heat to maintain a stable flame. In this situation, new No. 2 fuel oil is combusted to provide the additional required heat input to maintain a stable flame. Flame stabilization due to equipment failure occurs when coal piping is plugged, or equipment is otherwise damaged, that results in an inconsistent amount of coal reaching the burners. Under certain conditions, this may result in the burners intermittently seeing large amounts of fuel at one time, causing a potentially explosive flame "puff". In this situation, new No. 2 fuel oil must be used for stabilization to prevent flame "puffing" and ensure safe operation. Combustion of No. 2 fuel oil is also necessary during periods of load change to initialize and stabilize the flame until coal flow to the burners reaches steady state. As defined in 62-210.700(3), F.A.C., Load change occurs when the operational capacity of a unit is in the 10 to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.}

A.3. FGD Operation Required for Petcoke:

a. Whenever emissions Unit No. 1 or No. 2 is fired with petcoke in any amount up to the allowable percentage, its flue gases shall be directed to FGD system for Units No. 1 and No. 2.
[Permit Nos. 0570039-003-AC and 0570039-004-AC]
{Note: The owner or operator may operate each emissions unit without directing its emissions to the FGD system whenever petcoke is not being fired in the emissions unit.}

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

b. The permittee is allowed to divert and integrate all of Unit No. 3 flue gas for purposes of treating that flue gas in the existing Unit No. 4 flue gas desulfurization (FGD) system. At all times while firing any permitted blend of coal and petroleum coke, Unit No. 3 shall operate only in the integrated mode except during startups, shutdowns, and/or malfunctions during all of which best operational practices shall be employed including the cessation of petroleum coke bunkering.
[Rule 62-4.070(3), F.A.C., 40 CFR 60.40a, and Permit No. PSD-FL-040]

A.4. Limit on Petcoke Bunkering: The owner or operator at any given time shall not bunker more than the amount of petcoke that may be fired in each emissions Unit No. 1 or No. 2 in one day. [0570039-003-AC and 0570039-004-AC]
[Note: This condition is intended to limit possible excess emissions in the event of an unexpected breakdown of the FGD system that requires its shutdown while either emissions unit is firing petcoke.]

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

EMISSION LIMITATIONS AND STANDARDS

A.6. Except as provided in Specific Condition No. A.11., visible emissions from each unit shall not exceed 20% opacity except for one six-minute period per hour during which opacity shall not exceed 27%.
[Rule 62-296.405(1)(a), F.A.C.]

A.7. Except as provided in Specific Condition No. A.11., the particulate matter emission rate for each unit shall not exceed 0.1 pounds per million BTU heat input. {Permitting note: The averaging time for the emissions standard in this condition shall be equal to the cumulative run time required by the specified test method.}
[Rule 62-296.405(1)(b), F.A.C.]

A.8. Based on the maximum permitted heat input rates listed in Specific Condition A.1., the maximum permitted particulate matter annual emission rate for each unit is as follows:

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

In the event that a maximum permitted heat input rate for a unit is reduced, the maximum annual permitted particulate matter emission rate for that unit shall also be reduced accordingly.
[Rule 62-296.700(4)(b)1., F.A.C.]

A.9. Sulfur Dioxide Emission Limits. {Permitting Note: The Consent Final Judgement (DEP vs. TEC) dated December 6, 1999; and the Consent Decree (U.S. vs. TEC) dated February 29, 2000, including the October 4, 2000 amendment; which are part of this permit, supercede this specific condition. Wherever the Consent Decree conflicts with this permit condition, the Consent Decree takes precedence.}

a. Units No. 1, No. 2, and No. 3, each shall not emit more than 6.5 pounds of sulfur dioxide per million BTU heat input on a two-hour average; nor shall Units No. 1, No. 2, and No. 3, in total, emit more than 31.5 tons per hour of sulfur dioxide on a three-hour average and 25 tons per hour of sulfur dioxide on a 24-hour block average (midnight to midnight).
[Rules 62-296.405(1)(c)2.b. and 3., F.A.C.; and Rule 62-204.240(1), F.A.C.]

b. Integrated Operation - While in the integrated mode Units No. 3 and 4 shall meet the pounds per million Btu and percent reduction sulfur dioxide limitations that are applicable to Unit No. 4. (Specific Conditions B.7. and B.8.). Unit 3 will be operated in this integrated mode except during unit or FGD startups, shutdowns, maintenance and/or malfunctions, during all of which best operational practices shall be employed, including the cessation of bunkering fuels that would emit higher than 6.5 lb SO_2 per MMBtu.

c. Units No. 1 and No. 2, in total, shall not emit more than 16.5 tons per hour of sulfur dioxide on a 24-hour block average.

d. Unit No. 3 shall not emit more than 8.5 tons per hour of sulfur dioxide on a twenty-four hour block average.

e. While scrubbing sulfur dioxide emissions, the following table lists the sulfur dioxide emissions limits (lbs/hr) for six different operating scenarios:

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

*"Scrubbed" refers to operation while directing flue gas to the FGD system. "Unscrubbed" refers to operation while not directing flue gas to the FGD system.

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

A.10. Unit No. 3 shall not emit more than 0.70 of a pound of nitrogen oxides (expressed as NO_2) per million BTU heat input based upon a 30-day rolling average. [Rule 62-296.405(1)(d)4. and Rule 62-296.405(1)(e)4., F.A.C.]

A.11. *Excess Emissions.*

(1) Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (a) best operational practices to minimize emissions are adhered to and (b) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department or the Environmental Protection Commission of Hillsborough County (EPCHC) for longer duration.

(2) Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

(3) Excess emissions from existing fossil fuel steam generators resulting from boiler cleaning (soot blowing) and load change shall be permitted provided the duration of such excess emissions shall not exceed 3 hours in any 24-hour period and visible emissions shall not exceed Number 3 of the Ringelmann Chart (60 percent opacity), and providing (a) best operational practices to minimize emissions are adhered to and (b) the duration of excess emissions shall be minimized. A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more. Visible emissions above 60 percent opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions allowed by this specific condition A.11.(3), for boiler cleaning and load changes, at units which have installed and are operating continuous opacity monitors. Particulate matter emissions shall not exceed an average of 0.3 lbs. per million BTU heat input during the 3-hour period of excess emissions allowed by this specific condition A.1~~0~~1.(3).

(4) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.

(5) In case of excess emissions resulting from malfunctions, TECO shall notify the EPCHC in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the permitting authority or the EPCHC.
[Rule 62-210.700, F.A.C.]

TEST METHODS AND PROCEDURES

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

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

visible emissions, under both sootblowing and non-sootblowing operation conditions. When testing in CS0W1 or when testing in CS001, Unit No. 1 shall not be in operation during the compliance testing of Unit No. 2, and Unit No. 2 shall not be in operation during the compliance testing of Unit No. 1, but when testing in the ductwork between CS001 and the scrubber tower inlet, Unit No. 1 may operate during the compliance testing of Unit No. 2 and Unit No. 2 may operate during the compliance testing of Unit No. 1. Testing of Unit No. 3 emissions shall be prior to their mixing with the exhaust from the scrubber for Unit No. 4.
[Rules 62-297.310(7)(a)2. and 4., and 62-4.070(3), F.A.C.]

A.13. The test method for visible emissions shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. In lieu of Method 9 testing, a transmissometer utilizing a 6-minute block average for opacity measurement may be used, provided such transmissometer is installed, certified, calibrated, operated and maintained in accordance with the provisions of 40 CFR Part 75.
[Rule 62-296.405(1)(e)1., F.A.C., and request of applicant.]

A.14. The test methods for particulate emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated and adopted by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature at no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen base F-factor computed according to EPA Method 19 is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17.
[Rule 62-296.405(1)(e)2., F.A.C.]

A.15. Compliance testing for particulate matter emissions and visible emissions may be conducted either: (a) without fly ash re-injections occurring, or (b) while fly ash collected by the electrostatic precipitator is being re-injected into the boiler at a rate which is representative of the maximum anticipated fly ash re-injection rate. If the most recent particulate and visible emission compliance tests were conducted without fly ash re-injection occurring, and fly ash re-injection occurs for any reason other than a malfunction, then the results from new particulate and visible emissions compliance tests, conducted while fly ash collected by the precipitator is being re-injected into the boiler at a rate which is representative of the maximum anticipated fly ash re-injection rate, shall be submitted to the EPCHC within 60 days of the date that such fly ash re-injection occurred. The EPCHC may, for good cause shown, grant an extension of the 60-day time limit on a case-by-case basis.
[AO29-219924, AO29-179912, and AO29-179911]

~~A.16.~~ ~~Petcoke Sulfur Content: The owner or operator shall measure the sulfur content of representative samples of all petcoke received using appropriate ASTM methods to demonstrate compliance with the sulfur content limit of this permit.~~ ~~[Permit Nos. 0570039-003-AC & 0570039-004-AC]~~

A.17. Monitor Petcoke Usage: The owner or operator shall operate and maintain equipment to record and calculate the weight percentage of petcoke and coal bunkered and fired in each emissions unit, to verify compliance with the bunkering limit and the percentage limitation on petcoke usage of this permit.
[Rule 62-4.070(3), F.A.C.]

A.18. The permittee shall demonstrate compliance with the sulfur dioxide limits in Specific Condition A.9. by means of continuous emissions monitoring systems (CEMS). In addition to any other requirements associated with the operation and maintenance of these CEMS (i.e., Acid Rain requirements), operation of the CEMS shall be in accordance with the requirements listed in Specific Condition A.19. The annual calibration RATA associated with these CEMS may be used in lieu of the required annual EPA Reference Method 6, as long as all of the requirements of Rule 62-297.310, F.A.C., are met (i.e., prior test notification, proper test result submittal, etc.). [Applicant request.]

A.19. Continuous Monitor Performance Specifications. If continuous monitoring systems are required by rule or are elected by the permittee to be used for demonstrating compliance with the standards of the Department, they must be installed, maintained and calibrated, either:

(a) in accordance with the EPA performance specifications listed below. These Performance Specifications are contained in 40 CFR 60, Appendix B, and are adopted by reference in Rule 62-204.800, F.A.C.

(1) [Reserved]

(2) Performance Specification 2--Specifications and Test Procedures for SO_2 Continuous Emission Monitoring Systems in Stationary Sources.

(3) [Reserved], Or,

(b) in accordance with the applicable requirements of 40 CFR 75, Subparts B and C. Excess emissions pursuant to Rule 62-210.700, F.A.C., shall be determined using the 40 CFR part 75 CEMS.

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

A.20. Compliance with nitrogen oxides emission limit for Unit No. 3 shall be demonstrated continuously based upon a 30-day rolling average. The 30-day rolling average shall be determined by calculating the arithmetic average of all hourly emission rates for NO_X for the 30 successive boiler operating days, except for data obtained during startup, shutdown, malfunction. The calculations shall be consistent with the equations in 40 CFR 60, Appendix A, Reference Method 19. For the purpose of calculating a 30-day rolling average, a boiler operating day is defined as a 24-hour period (between 12:01 a.m. and 12:00 midnight) during which fossil fuel is combusted in a steam operating unit for the entire 24-hours.
[Permit No. AO29-179911 (July 29, 1994 amendment); 40 CFR 60.46a(g)]

A.21. The continuous emission monitors shall meet the quality assurance requirements and performance specifications contained in 40 CFR 75.
[Rule 62-296.401(1)(e)4., F.A.C.]

A.22. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.
[Rule 62-296.401(1)(e)5., F.A.C.]

A.23. For Units, No. 1, No. 2, and No. 3, TEC shall operate, calibrate, and maintain a continuous monitoring system for continuously monitoring opacity. For Unit No. 3, TECO shall also operate calibrate, and maintain a continuous monitoring system for continuously monitoring nitrogen oxides (expressed as NO_2). In addition, TEC shall operate calibrate, and maintain a continuous monitoring system for continuously monitoring sulfur dioxide for Unit Nos. 1, 2, and 3 in a manner sufficient to demonstrate compliance with the emission limits of this permit. Performance specifications, location of monitor, data requirements, data reduction and reporting requirements shall conform with the requirements of 40 CFR Part 51, Appendix P, adopted and incorporated by reference in Rule 62-204.800(2), F.A.C., and 40 CFR Part 60, Appendix B, adopted by reference in Rule 62-204.800(7), F.A.C.
[Rule 62-296.401(1)(f), F.A.C.]

A.24. An oxygen or carbon dioxide continuous monitoring system shall be operated for Unit No. 3. Measurements of oxygen or carbon dioxide in the flue gas shall be utilized to convert nitrogen oxides and sulfur dioxide continuous emission monitoring data to units of pounds per million BTU heat input for proof of compliance.
[Rule 62-296.401(1)(f)1.d., F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

A.25. Records of Operation: The owner or operator shall make and maintain a daily record of operation of each emissions unit showing the date, fuel(s) used, whether flue gas was directed to the FGD system, and the duration of all startups, shutdowns and malfunctions. Records of fuel bunkering and petcoke usage (weight percent of petcoke fired) shall also be made on at least a daily basis. Data that verifies compliance with the percentage limitation on petcoke usage shall be submitted with the annual operating report. [Rule 62-4.070(3), F.A.C.]

~~A.26. Records of Petcoke Sulfur Content: The owner or operator shall maintain records of petcoke sampling and analysis results performed as required by Specific Condition A.16. of this section. [Rule 62-4.070(3), F.A.C., and permit nos. 0570039-003-AC & 0570039-004-AC]~~

A.27. Quarterly Reporting Requirements: The owner or operator shall submit to the Department a written report of emissions in excess of emission limiting standards of this permit for each calendar quarter. The nature and cause of the excessive emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file for a period of five years. Copies of all submittals shall be submitted to the Air Management Division, Hillsborough County Environmental Protection Commission. [Rules 62-4.070(3) and 62-296.405(1)(g), F.A.C.]

A.28. For each unit, TEC shall submit to the EPCHC a written report of emissions in excess of the emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excessive emissions shall be explained. This report does not relieve TEC of the legal liability for violations. All recorded data shall be maintained on file for a period of at least 5 years. The report shall be submitted within 30 days following each calendar quarter.
[Rule 62-296.405(1)(g) and Rule 62-213.440(1)(b)2.b., F.A.C.]

A.29. For Unit No. 3, gravimetric instrument data verifying that the 20.0% maximum petroleum coke content by weight has not been exceeded shall be maintained for two years and submitted to the Department and the EPCHC with each annual operating report. Also to be maintained and available for inspection shall be a record of operation showing the date, fuel used, mode of operation (integrated/non-integrated), and the duration of all startups, shutdowns and malfunctions.
[Rule 62-4.070(3), F.A.C.]

A.30. For Unit No. 3, TEC shall maintain and submit to the Department and the EPCHC on an annual basis for a period of 5 years from the date the unit begins firing petroleum coke, data demonstrating that the operational change did not result in an emissions increase.
[Rule 62-4.070(3), F.A.C.]

A.31. For Unit No. 3, TEC shall submit a quarterly report to the Department and the EPCHC within 30 days following each calendar quarter. This report shall contain the 30-day NO_X rolling average, all time

periods of boiler operation as well as a statement of CEM and/or boiler malfunction, start-up or shutdown.
[Permit No. AO29-179911 (July 29, 1994 amendment)]

A.32. Continuous Emission Monitoring Network and Alarms:
To demonstrate compliance with emission limits that are protective of AAQS, data inputs will consist of hourly CEM data from the SO_2, flow, and CO_2 monitors for Units 1-3 at Big Bend Station. TEC will use CEM data from common stack CS001 to represent individual unit compliance with the emission limitations for each Unit 1 and Unit 2. When Unit 3 is operated in the integrated mode, TEC will use apportioned CEM data from both common stacks CS002 and CS003 to represent individual unit compliance with the emission limitations for Unit 3. In the event any monitor fails, TEC will comply with 40 CFR 75, Subpart D – Missing Data Substitution Procedures.
[Applicant request.]

A.33. Compliance Plan Verification:
1. *Frequency* – Reporting of compliance status shall be performed on a quarterly calendar basis. Reports will be due no later than 45 days following the last day of the reporting quarter.
2. *Content* – Quarterly reports will consist of:
   a. two-hour average SO_2 emissions rate for each Units 1, 2, and 3 in lb/MMBtu;
   b. three-hour average SO_2 emissions for Units 1-3 in ton per hour;
   c. 24-hour average SO_2 emissions for Units 1-3 in tons per hour; and
   d. 24-hour average SO_2 emissions for Units 1-2 and Unit 3 in tons per hour.

[Applicant request.]

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

E.U. ID No.	Brief Description
-004	Unit No. 4 Steam Generator
-003	Unit No. 3 Steam Generator, only when operated in integrated mode.

Unit No. 4 is a 4330 MMBTU/hour, dry-bottom tangentially fired utility boiler, SCC 1-01-002-12. The generator nameplate capacity is 486 MW. Unit No. 4 began commercial operation in 1985. Particulate matter emissions generated during the operation of the unit are controlled by a dry electrostatic precipitator (ESP) manufactured by Belco. The control efficiency of the ESP is 99.7%. Sulfur dioxide emissions are controlled by flue gas desulfurization equipment manufactured by Research-Cottrell.

As an option, Unit No. 3 exhaust gas, following particulate matter removal by the unit's ESP, will be routed to the inlet of the Unit No. 4 flue gas desulfurization (FGD) system scrubber. In this integrated mode, Unit No. 3 will meet the same sulfur dioxide emissions limitations as Unit No. 4. The FGD scrubber will continue to treat the exhaust gas from Unit No. 4. The FGD scrubber outlet stream, consisting of the combined Unit No. 3 and Unit No. 4 treated exhaust, will then be split and discharged through stacks CS002 and CS003. Stack CS003 does *not* include a recirculation duct to return exhaust gas to the inlet of the FGD scrubber. Continuous opacity monitoring systems (COMS) will be located at the outlet of Unit No. 3 and Unit No. 4 ESPs. Continuous SO_2, CO_2, and NOx emissions monitoring systems (CEMS) will be located in stacks CS002 and CS003. These monitoring systems will be used to determine compliance with all current applicable requirements.

{Applicable regulations for Unit No. 4: 40 CFR 60 Subpart Da, and the federal Acid Rain Program, Phase II SO_2 and NO_x, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; PA79-12, PSD-FL-040 and an ASP for Coal Sampling.}

The following conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Capacity. The maximum permitted heat input rate for Unit No. 4 is 4330 MMBTU/hr.
[Rules 62-4.160(2), and 62-4.070(3), F.A.C.]
{Permitting note: The heat input limitation has been placed in this permit to identify the capacity of the unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular recordkeeping, other than annual, is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rate capacity that the unit was tested. Rule 62-297.310(5), F.A.C., requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods to calculate average hourly heat input during the test. Annual heat input must be calculated in order to determine annual emissions of pollutants whose limits are based upon heat input.}

B.2. Methods of Operation - Fuels.

a. Normal operation: The only fuels fired in Unit No. 4 shall be coal, ~~or a~~ coal/petroleum coke Blend, residual fuel, or beneficiated fuel containing a maximum of 20.0% petroleum coke by weight. **The vanadium content of the petroleum coke fired shall not exceed 2660 ppm. The ash content of the petroleum coke fired shall not exceed 0.76% by weight on a dry basis. The permittee shall maintain and submit to the Department, and to the Environmental Protection Commission of Hillsborough County, on an annual basis for the years 2001, 2002, 2003, 2004, and 2005 data demonstrating that removal of the sulfur content limit and the revision of the vanadium content limit in the petroleum coke fired did not result in a significant increase in the representative actual annual emissions of any regulated pollutant.**

b. Other operation: In addition to the fuels allowed to be burned during normal operation, Unit No. 4 may also burn new No. 2 fuel during startup, shutdown, flame stabilization and during the start of an additional solid fuel crusher on an already operating unit. Evaporation of up to 150,000 gallons per year, total at the facility, is allowed of non-hazardous, but potentially HAP-emitting, mineral acid solution boiler chemical cleaning waste which was generated on site.

c. Coal shall not be burned in Unit No. 4 unless both the electrostatic precipitator and limestone scrubber are operating properly.

d. Coal burned in Unit No. 4 shall be washed before it is transported to the plant site. TEC shall maintain records of all coal washing and preparation activities for any coal which is to be fired in Big Bend Unit No. 4. These reports shall be submitted to the Department on a quarterly basis.

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

[Rules 62-4.070(3), 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C.; PSD-FL-040; Power Plant Siting Certification PA 79-12]

{Permitting note: "Flame stabilization" is defined as the use of No. 2 fuel oil to stabilize a flame during times of unexpected poor coal quality or equipment failure such as coal piping pluggage. Flame stabilization due to poor coal quality occurs when coal is wet or does not provide the necessary heat to maintain a stable flame. In this situation, No. 2 fuel oil is combusted to provide the additional required heat input to maintain a stable flame. Flame stabilization due to equipment failure occurs when coal piping is plugged, or equipment is otherwise damaged, that results in an inconsistent amount of coal reaching the burners. Under certain conditions, this may result in the burners intermittently seeing large amounts of fuel at one time, causing a potentially explosive flame "puff". In this situation, No. 2 fuel oil must be used for stabilization to prevent flame "puffing" and ensure safe operation. Combustion of No. 2 fuel oil is also necessary during periods of load change to initialize and stabilize the flame until coal flow to the burners reaches steady state. As defined in 62-210.700(3), F.A.C., Load change occurs when the operational capacity of a unit is in the 10 to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.}

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

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

B.4. Hours of Operation. Unit No. 4 is allowed to operate continuously, i.e., 8760 hours/year.

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

Emission Limitations and Standards

B.5.a. Particulate matter emissions from Unit No. 4 shall not exceed 0.03 lb/million Btu heat input. This standard applies at all times except during periods of startup, shutdown, or malfunction.
[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.42a(a); 40 CFR 60.46a(a); 40 CFR 60.46a(c)]
b. Based on the maximum permitted heat input rate listed in Specific Condition B.1., particulate matter emissions from Unit No. 4 shall not exceed 129.9 lbs/hour, 3118 lbs/day, and 569.0 tons/year.
[PSD-FL-040 and Rule 62-296.700(4)(b)1., F.A.C.]
{Permitting note: The averaging time for the emissions standard in this condition shall be equal to the cumulative run time required by the specified test method.}

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

B.7. Sulfur dioxide emissions from Unit No. 4 when combusting solid fuel shall not exceed 1.2 lb/million Btu on a 2 hour average, 0.82 lb/million Btu heat input and 10 percent of the potential combustion concentration (90 percent reduction). Based upon a heat input of 4330 million Btu/hour, SO_2 emissions shall not exceed 3551 lb/hr.
[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.43a(a)(1); PSD-FL-040, Conditions of Certification]

B.8. Compliance with sulfur dioxide emission limitations and percent reduction requirements is determined on a 30-day rolling average basis.
[Rule 62.204.800(7)(b)2., F.A.C.; 40 CFR 60.43a(g)]

B.9. Nitrogen dioxide emissions from Unit No. 4 when combusting bituminous or anthracite coal, or a coal/petroleum coke blend, shall not exceed 0.60 lb/million Btu heat input. Based upon a heat input of 4330 million Btu/hour, NO_X emissions shall not exceed 2598 lb/hr. These emission limits are based on a 30-day rolling average. These standards apply at all times except during periods of startup, shutdown, or malfunction.
[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.44a(a); 40 CFR 60.4a(c), PSD-FL-040]

B.10. Carbon monoxide (CO) emissions from Unit No. 4 shall not exceed 0.029 lb/million Btu heat input, and shall not exceed 124 lb/hr.
[PSD-FL-040 (October 9, 1985 modification)]
{Permitting note: The averaging time for the emissions standard in this condition shall be equal to the cumulative run time required by the specified test method.}

Compliance provisions.

B.11. The sulfur dioxide emission standards in specific condition B.7. apply at all times except during periods of startup, shutdown, or when both emergency conditions exist and the following procedures in specific condition B.12. are implemented.
[Rule 62-296.800(7)(b)2., F.A.C.; 40 CFR 60.46a(c)]

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

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

(2~~) Bypassing~~) Bypassing flue gases around only those flue gas desulfurization system modules that have been taken out of operation because they were incapable of any sulfur dioxide emission reduction or which would have suffered significant physical damage if they had remained in operation, and

(3) Operating a *spare* flue gas desulfurization system module. The Department or EPCHC may at their discretion require TEC within 60 days of notification to demonstrate spare module capability. To demonstrate this capability, the owner or operator must demonstrate compliance with the appropriate requirements of specific conditions B.5. and B.7. for any period of operation lasting from 24 hours to 30 days when:

(i) Any one flue gas desulfurization module is not operated,

(ii) The affected facility is operating at the maximum heat input rate,

(iii) The fuel fired during the 24-hour to 30-day period is representative of the type and average sulfur content of fuel used over a typical 30-day period, and

(iv) TEC has given the Department or EPCHC at least 30 days notice of the date and period of time over which the demonstration will be performed.

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

B.13. Compliance with the sulfur dioxide emission limitations and percentage reduction requirements in specific condition B.7., and the nitrogen oxides emission limitations in specific condition B.~~10~~9., is based on the *average emission rate* for 30 successive boiler operating days. A separate performance test is completed at the end of each boiler operating day after the initial performance test, and a new 30 day *average emission rate* for both sulfur dioxide and nitrogen oxides and a new percent reduction for sulfur dioxide are calculated to show compliance with the standards.

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

B.14. Compliance is determined by calculating the arithmetic average of all hourly *emission rates* for SO_2 and NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown, malfunction (NO_x only), or emergency conditions (SO_2 only). Compliance with the percentage reduction requirement for SO_2 is determined based on the average inlet and average outlet SO_2 emission rates for the 30 successive boiler operating days.

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

B.15. If TEC has not obtained the minimum quantity of emission data as required in the following emission monitoring specific conditions B.16. through B.25, compliance of Unit No. 4 with the sulfur dioxide and nitrogen oxides standards for the day on which the 30-day period ends may be determined by the Administrator by following the applicable procedures in section 7 of Method 19, *Determination of Compliance When Minimum Data Requirement Is Not Met.*

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

Emission Monitoring.

B.16. TEC shall calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the opacity of emissions discharged to the atmosphere. If opacity

interference due to water droplets exists in the stack (for example, from the use of an FGD system), the opacity is monitored upstream of the interference (at the inlet to the FGD system). If opacity interference is experienced at all locations (both at the inlet and outlet of the sulfur dioxide control system), alternate parameters indicative of the particulate matter control system's performance are monitored (subject to the approval of the Department and the EPCHC.)
[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a(a)]

B.17. TEC shall calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring sulfur dioxide emissions as follows:
(1) Sulfur dioxide emissions are monitored at both the inlet and outlet of the sulfur dioxide control device.
(2) An "as fired" fuel monitoring system (upstream of coal pulverizers) meeting the requirements of Method 19, Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates, may be used to determine potential sulfur dioxide emissions in place of a continuous sulfur dioxide emission monitor at the inlet to the sulfur dioxide control device as required in the preceding specific condition B.17.(1).
[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a(b); 40 CFR 60, App. A, Method 19]

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

B.19. TEC shall calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring the oxygen and/or carbon dioxide content of the flue gases at each location where sulfur dioxide or nitrogen oxides emissions are monitored. The sulfur dioxide, nitrogen dioxide, oxygen and/or carbon dioxide, and opacity monitoring devices shall meet the applicable requirements of Section 62-214, F.A.C., 40 CFR 60.47a., and 40 CFR 75.). The opacity monitor shall be placed in the duct work between the electrostatic precipitator and the FGD scrubber. When Units 3 and 4 are operating in the integrated mode (Unit 3 flue gases routed through the Unit 4 FGD system), the continuous monitoring system will measure sulfur dioxide emissions at the inlet and outlet of the Unit 4 FGD system and from the Unit 3 stack (CS002), while emissions of nitrogen oxides, oxygen and/or carbon dioxide, and opacity shall be measured in the Unit 4 duct prior to the FGD system. When Units 3 and 4 are not operating in the integrated mode, the continuous monitoring system will measure only Unit 4's inlet duct and stack for SO_2 emissions. The emissions of nitrogen oxides, oxygen and/or carbon dioxide, and opacity shall be measured in the Unit 4 duct prior to the FGD system.
[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a(d); Power Plant Siting Certification PA 79-12D]

B.20. The continuous monitoring systems required in specific conditions B.17., B.18., and B.19., shall be operated and record data during all periods of operation of Unit No. 4 including periods of startup, shutdown, malfunction or emergency conditions, except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments.
[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a(e)]

B.21. TEC shall obtain emission data for at least 18 hours in at least 22 out of 30 successive boiler operating days. If this minimum data requirement cannot be met with a continuous monitoring system, TEC shall supplement emission data with other monitoring systems approved by the Department or the EPCHC, or the reference methods and procedures as described in Specific Condition B.23.

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

B.22. The 1-hour averages required under 40 CFR 60.13(h), *Monitoring Requirements*, are expressed in lbs/million Btu heat input and used to calculate the average emission rates required in ~~specific conditions~~specific conditions B.13. and B.14. The 1-hour averages are calculated using the data points required under 40 CFR 60.13(b), *Monitoring Requirements*. At least two data points must be used to calculate the 1-hour averages.
[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a(g)]

B.23. When it becomes necessary to supplement continuous monitoring system data to meet the minimum data requirements in specific condition B.21., TEC shall use the following reference methods and procedures. Acceptable alternative methods and procedures are given in specific condition B.25.

(1) Method 6 shall be used to determine the SO_2 concentration at the same location as the SO_2 monitor. Samples shall be taken at 60-minute intervals. The sampling time and sample volume for each sample shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Each sample represents a 1-hour average.

(2) Method 7 shall be used to determine the NO_X concentration at the same location as the NO_X monitor. Samples shall be taken at 30-minute intervals. The arithmetic average of two consecutive samples represents a 1-hour average.

(3) The emission rate correction factor, integrated bag sampling and analysis procedure of Method 3B shall be used to determine the O_2 or CO_2 concentration at the same location as the O_2 or CO_2 monitor. Samples shall be taken for at least 30 minutes in each hour. Each sample represents a 1-hour average.

(4) The procedures in Method 19 shall be used to compute each 1-hour average concentration in lb/million Btu heat input.

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

B.24. TEC shall use the following methods and procedures to conduct the monitoring system performance evaluations required under *40 CFR 60.13(c), Monitoring Requirements,* and the calibration checks required under *40 CFR 60.13(d), Monitoring Requirements*. Acceptable alternative methods and procedures are given in specific condition B.25.

(1) Methods 6, 7, and 3B, as applicable, shall be used to determine O_2, SO_2, and NO_X concentrations

(2) SO_2 or NO_X (NO), as applicable, shall be used for preparing the calibration gas mixtures (in N_2, as applicable) under 40 CFR 60 Appendix B, Performance Specification 2.

(3) The span value for a continuous monitoring system for measuring opacity is between 60 and 80 percent and for a continuous monitoring system measuring nitrogen oxides is determined as follows

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

(4) Reserved

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

the fuel fired, and the outlet of the sulfur dioxide control device is 50 percent of maximum estimated hourly potential emissions oil fuel, alone or in combination with non-fossil fuel, the span value of the fuel fired.
[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a(i); 40 CFR 60.13; 40 CFR 60 Appendix A, Methods 3B, 6, and 7; 40 CFR 60 Appendix B, Performance Specification 2.]

B.25. TEC may use the following as alternatives to the reference methods and procedures specified in conditions B.23. and B.24.:
(1) For Method 6, Method 6A or 6B (whenever Methods 6 and 3 or 3B data are used) or 6C may be used. Each Method 6B sample obtained over 24 hours represents 24 1-hour averages. If Method 6A or 6B is used under specific condition B.24., the conditions under 40 CFR 60.46(d)(1) apply; these conditions do not apply under specific condition B.23.
(2) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be 1 hour.
(3) For Method 3, Method 3A or 3B may be used if the sampling time is 1 hour.
(4) For Method 3B, Method 3A may be used.
[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.47a(j); 40 CFR 60.46(d)(1), 40 CFR 60 Appendix A, Methods 3, 3A, 3B, 6, 6A, 6B, 6C, 7, 7A, 7C, 7D, and 7E]

<u>Compliance determination procedures and methods.</u>

B.26. In conducting the performance tests required in *40 CFR 60.8*, the owner or operator shall use as reference methods and procedures the methods in appendix A of 40 CFR 60 or the methods and procedures as specified in conditions B.27. through B.30., except as provided in *40 CFR 60.8(b). 40 CFR 60.8(f)* does not apply to specific conditions B.28 and B.29. for SO_2 and NO_X. Acceptable alternative methods are given in specific condition B.30.
[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.48a(a); 40 CFR 60.8]

B.27. TEC shall determine compliance with the particulate matter standards in specific condition B.5. as follows:
(1) The dry basis F factor (O_2) procedures in Method 19 shall be used to compute the emission rate of particulate matter.
(2) For the particular matter concentration, Method 5B shall be used after **wet** FGD systems.
(i) The sampling time and sample volume for each run shall be at least 120 minutes and 1.70 dscm (60 dscf). The probe and filter holder heating system in the sampling train may be set to provide an average gas temperature of no greater than 160±14 °C (320±25 °F).
(ii) For each particulate run, the emission rate correction factor, integrated or grab sampling and analysis procedures of Method 3B shall be used to determine the O_2 concentration. The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 traverse points. If the grab sampling procedure is used, the O_2 concentration for the run shall be the arithmetic mean of all the individual O_2 concentrations at each traverse point.
(3) Method 9 and the procedures in *40 CFR 60.11* shall be used to determine opacity.
[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.48a(b); 40 CFR 60.11, 40 CFR 60 Appendix A, Methods 1, 3B, 5B, 9, and 19]

B.28. TEC shall determine compliance with the SO_2 standards in specific condition B.7. as follows:

(1) The percent of potential SO_2 emissions (%Ps) to the atmosphere shall be computed using the following equation:

$$\%P_s = [(100 - \%R_f)(100 - \%R_g)]/100$$

where:

$\%P_s$	=	percent of potential SO_2 emissions, percent.
$\%R_f$	=	percent reduction from fuel pretreatment, percent.
$\%R_g$	=	percent reduction by SO_2 control system, percent.

(2) The procedures in Method 19 may be used to determine percent reduction ($\%R_f$) of sulfur by such processes as fuel pretreatment (physical coal cleaning, hydrodesulfurization of fuel oil, etc.), coal pulverizers, and bottom and flyash interactions. This determination is optional.

(3) The procedures in Method 19 shall be used to determine the percent SO_2 reduction ($\%R_g$ of any SO_2 control system. Alternatively, a combination of an "as fired" fuel monitor and emission rates measured after the control system, following the procedures in Method 19, may be used if the percent reduction is calculated using the average emission rate from the SO_2 control device and the average SO_2 input rate from the "as fired" fuel analysis for 30 successive boiler operating days.

(4) The appropriate procedures in Method 19 shall be used to determine the emission rate.

(5) The continuous monitoring systems specified in conditions B.17. and B.19. shall be used to determine the concentrations of SO_2 and CO_2 or O_2.

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

B.29. TEC shall determine compliance with the NO_x standards in specific condition B.9. as follows:

(1) The appropriate procedures in Method 19 shall be used to determine the emission rate of NO_x.

(2) The continuous ~~continuos~~ monitoring systems specified in specific conditions B.18. and B.19. shall be used to determine the concentrations of NO_x and CO_2 or O_2.

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

B.30. TEC may use the following as alternatives to the reference methods and procedures specified in condition B.27:

(1) For Method 5 or 5B, Method 17 may be used at Unit No. 4 if the stack temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). The procedures of sections 2.1 and 2.3 of Method 5B may be used in Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after wet FGD systems if the effluent is saturated or laden with water droplets.

(2) The F_c factor (CO_2) procedures in Method 19 may be used to compute the emission rate of particulate matter under the stipulations of *40 CFR 60.46(d)(1)*. The CO_2 shall be determined in the same manner as the O_2 concentration.

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

Reporting requirements.

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

B.32. For sulfur dioxide and nitrogen oxides the following information shall be reported to the Department and the EPCHC for each 24-hour period.

(1) Calendar date.

(2) The average sulfur dioxide and nitrogen oxide emission rates (lb/million Btu heat input) for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the emission standards; and, description of corrective actions taken.

(3) Percent reduction of the potential combustion concentration of sulfur dioxide for each 30 successive boiler operating days, ending with the last 30-day period in the quarter; reasons for non-compliance with the standard; and, description of corrective actions taken.

(4) Identification of the boiler operating days for which pollutant or dilutent data have not been obtained by an approved method for at least 18 hours of operation of the facility; justification or not obtaining sufficient data; and description of corrective actions taken.

(5) Identification of the times when emissions data have been excluded from the calculation of average emission rates because of startup, shutdown, malfunction (NO_X only), emergency conditions (SO_2 only), or other reasons, and justification for excluding data for reasons other than startup, shutdown, malfunction, or emergency conditions.

(6) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.

(7) Identification of times when hourly averages have been obtained based on manual sampling methods.

(8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.

(9) Description of any modifications to the continuous monitoring system which could affect the ability of the continuous monitoring system to comply with 40 CFR 60 Appendix B, Performance Specifications 2 or 3.

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

B.33. If the minimum quantity of emission data, as required by the emission monitoring specific conditions B.16. through B.25., is not obtained for any 30 successive boiler operating days, the following information obtained under the requirements of specific condition B.15. shall be reported to the Administrator for that 30-day period:

(1) The number of hourly averages available for outlet emission rates (n_o) and inlet emission rates (n_i) as applicable.

(2) The standard deviation of hourly averages for outlet emission rates (s_o) and inlet emission rates (s_i) as applicable.

(3) The lower confidence limit for the mean outlet emission rate (E_o*) and the upper confidence limit for the mean inlet emission rate (E_i*) as applicable.

(4) The applicable potential combustion concentration.

(5) The ratio of the upper confidence limit for the mean outlet emission rate (E_o*) and the allowable emission rate (E_{std}) as applicable.

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

B.34. If any sulfur dioxide standards under specific condition B.7. is exceeded during emergency conditions because of control system malfunction, the owner or operator of the affected facility shall submit a signed statement:

(1) Indicating if emergency conditions existed and requirements under specific condition B.14. were met during each period, and

(2) Listing the following information:

(i) Time periods the emergency condition existed;

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

(iii) Amount of power purchased from interconnected neighboring utility companies during the emergency period;

(iv) Percent reduction in emissions achieved;

(v) Atmospheric emission rate (ng/J ~~or lb~~or lb/MMBtu) of the pollutant discharged; and

(vi) Actions taken to correct control system malfunction.

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

B.35. If fuel pretreatment credit is claimed toward the sulfur dioxide emission standards in specific condition B.7. TEC shall submit a signed statement:

(1) Indicating what percentage cleaning credit was taken for the calendar quarter, and whether the credit was determined in accordance with the provisions ~~of specific~~of specific condition B.28. and Method 19 (Appendix A of 40 CFR 60); and

(2) Listing the quantity, heat content, and date each pretreated fuel shipment was received during the previous quarter; the name and location of the fuel pretreatment facility; and the total quantity and total heat content of all fuels received at the affected facility during the previous quarter.

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

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

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

B.37. The owner or operator of the affected facility shall submit a signed statement indicating whether:

(1) The required continuous monitoring system calibration, span, and drift checks or other periodic audits have or have not been performed as specified.

(2) The data used to show compliance was or was not obtained in accordance with approved methods and procedures of this part and is representative of plant performance.

(3) The minimum data requirements have or have not been met; or, the minimum data requirements have not been met for errors that were unavoidable.

(4) Compliance with the standards has or has not been achieved during the reporting period.

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

B.38. For the purposes of the reports required under *40 CFR 60.7*, periods of excess emissions are defined as all 6-minute periods during which the average opacity exceeds the applicable opacity standards under specific condition B.6. Opacity levels in excess of the applicable opacity standard and the date of such excesses are to be submitted to the Administrator each calendar quarter.
[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.49a(h)]

B.39. The owner or operator of an affected facility shall submit the written reports required under this section and subpart A to the Department and the EPCHC for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.
[Rule 62-204.800(7)(b)2., F.A.C.; 40 CFR 60.49a(i)]

B.40. Gravimetric instrument data verifying that the 20.0% maximum petroleum coke content by weight has not been exceeded shall be maintained for five years and submitted to the Department and the EPCHC with each annual operating report. Also to be maintained and available for inspection shall be a daily record of operation showing the date, fuel used, mode of operation (integrated/non-integrated), and the duration of all startups, shutdowns and malfunctions. TEC shall maintain copies of fuel analyses containing information on sulfur content, ash content, and heating values.
[PSD-FL-040; Rules 62-4.070(3), 62-213.440(1)(b)2.b., F.A.C., and Power Plant Siting Certification PA 79-12]

B.41. TEC shall submit to the Department a standardized plan or procedure that will allow the permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.
[Power Plant Siting Certification PA 79-12]

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

B.43. Stack height. The height of the boiler exhaust stack for Unit No. 4 (CS003) shall not be less than 490 ft. above grade.
[Power Plant Siting Certification PA 79-12]

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

B.44. Definitions. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee.
[40 CFR 60.2; Rule 62-204.800(7)(a), F.A.C.]

<u>40 CFR 60.7 Notification and record keeping.</u>

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

A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.
[40 CFR 60.7(a)(4)]

B.46. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.
[40 CFR 60.7(b)]

B.47. Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:
(1~~) The~~<u>) The</u> magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
(2~~) Specific~~<u>) Specific</u> identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
(3~~) The~~<u>) The</u> date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
(4~~) When~~<u>) When</u> no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
[40 CFR 60.7(c)(1), (2), (3), and (4)]

B.48. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

(1~~) If~~<u>) If</u> the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.

(2~~) If~~) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance} (electronic file name: figure1.doc)

[40 CFR 60.7(d)(1) and (2)]

B.49. (1~~) Notwithstanding~~) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i~~) For~~) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;

(ii~~) The~~) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and

(iii~~) The~~) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

(2~~) The~~) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3~~) As~~) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)(1)]

B.50. Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing

monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[40 CFR 60.11(d)]

B.57. The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of EPA Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he or she shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which EPA Method 9 data indicates noncompliance, the EPA Method 9 data will be used to determine opacity compliance.
[40 CFR 60.11(e)(5)]

<u>40 CFR 60.12 Circumvention.</u>

B.58. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.
[40 CFR 60.12]

<u>40 CFR 60.13 Monitoring requirements.</u>

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

B.60. If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, Appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted.

Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in Appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

(1~~) The~~) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 60.8 and as described in 40 CFR 60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 60.8 is conducted.
[40 CFR 60.13(c)(1)]

B.61. (1~~) Owners~~) Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(2~~) Unless~~) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.
[40 CFR 60.13(d)(1) and (2)]

B.62. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1~~) All~~) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2~~) All~~) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
[40 CFR 60.13(e)(1) and (2)]

B.63. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained.

Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used.
[40 CFR 60.13(f)]

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

B.65. Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O_2 or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).
[40 CFR 60.13(h)]

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

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

Descriptions

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

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

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

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

The following conditions apply to the Emissions Units listed above:

Essential Potential to Emit (PTE) Parameters

C.1. Methods of Operation - Fuels. The combustion turbines shall be fired on No. 2 distillate fuel oil and operated for intermittent peaking and emergency services only.
[Rule 62-4.160(2), F.A.C., Construction application request]

C.2. Hours of Operation. Operation of each gas turbine shall not exceed 3650 hours of operation during any consecutive 12 months. [Design; Rule 62-210.200, F.A.C. (Definitions - PTE), Permit No. 057-0039-006-AC]

C.3. Inlet Fogger Operation: Combined operation of the inlet air foggers for both gas turbines CT-2 and CT-3 shall not exceed 1365 total hours during any consecutive 12 months. [Design; Rule 62-212.400, F.A.C. (BACT); Rule 62-210.200, F.A.C. (Definitions - PTE), Permit No. 057-0039-006-AC]

C.4. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of this permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator shall notify the Compliance Authority by phone, FAX, or letter as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include pertinent information as to the cause of the problem, the steps being taken to correct the problem and prevent future recurrence, and the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rule 62-4.130, F.A.C., Permit No. 057-0039-006-AC]

Emission Limitations and Standards

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

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

C.6. During each federal fiscal year (October 1 - September 30) the Tampa Electric Company shall have formal compliance tests conducted on each combustion turbine for opacity. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
[Rule 62-296.712, Rule 62-297.310(7)(a)4.a., , and Rule 62-297.310(7)(a)8., F.A.C.]

C.7. The test methods for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

Recordkeeping and Reporting Requirements

C.8. If TEC chooses to conduct a visible emissions compliance test only once per five-year period, per Rule 62-297.310(7)(a)8., daily recordkeeping of the hours of operation is required to show that the 400-hour annual limit is not exceeded each year during the five-year period.
[Rule 62-297.310(7)(a)8., and Rule 62-4.070(3), F.A.C.]

C.9. Documentation of the type, quantity, and analysis of the fuel oil used/received is required. Records shall be kept for five years.
[Rules 62-4.070(3) and 62-213.440(1), F.A.C.]

C.10. The average daily and total annual hours of operation for each combustion turbine shall be submitted in an annual operation report. In addition, for each combustion turbine, annual emissions reporting requirements, apply to emissions of each pollutant that a turbine emits in the following quantities:

(1) for PM_{10}, sulfur oxides, VOC, and nitrogen oxides - 25 tons per year or more,
(2) for carbon monoxide - 250 tons per year or more,
(3) for lead or lead compounds, measured as elemental lead - 5 tons per year or more.
[62-210.370(3), F.A.C., 40 CFR 51.322(b)]

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

Compliance Demonstrations

C.11. Records: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to DEP representatives upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2., F.A.C.]

C.12. Monthly Operations Summary: By the fifth calendar day of each month, the permittee shall record the following information in a written log for the previous month of operation and for the previous 12 months of operation: the number of operational hours for each gas turbine; the number of hours of inlet air fogging for each gas turbine; and the total combined number of hours of inlet air fogging for both gas turbines. The Monthly Operations Summary shall be maintained on site in a legible format available for inspection at the Department's request. [Rule 62-4.160(15), F.A.C.]

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

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

Descriptions

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

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

The following conditions apply to the Emissions Units listed above:

Essential Potential to Emit (PTE) Parameters

D.1. Capacity. The maximum permitted loading rate for all Fly Ash Silo No. 1 processes combined is 44.5 tons per hour. For Fly Ash Silo No. 2, the maximum permitted loading rate is the simultaneous maximum transfer of flyash from boiler Units 1, 2, and 3. Separate testing of emissions from each unit shall be conducted with each emissions unit operation at 90 to 100 percent of the maximum permitted heat input rate. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[AC29-194516; AO29-161082; Rule 62-4.160(2), and Rule 62-297.310(2), F.A.C.]
{Permitting note: The material loading limitations have been placed in each permit to identify the capacity of each emissions unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the emissions unit's rated capacity (or to limit future operation to 110

percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular recordkeeping is not required for material loading. Instead the owner or operator is expected to determine material loading whenever the emission testing is required, to demonstrate at what percentage of the rated capacity that the emissions unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of process variables for emission tests. Material loading demonstrations may be based on best engineering evaluation of the operating requirements necessary to achieve 90 to 100 percent of the rated loading, unless such operating conditions are otherwise specified by permit condition.}

D.2. Hours of Operation. Fly Ash Silos No. 1 and No. 2 are each allowed to operate continuously, i.e., 8760 hours/year.
[Rule 62-210.200, F.A.C., Definitions (PTE)]

Emission Limitations and Standards

D.3. Visible emissions from each silo baghouse shall ~~not be equal to or greater~~be less than 20 percent opacity. Visible emissions from each silo truck loadout shall ~~not be equal to or greater~~be less than 20 percent opacity.
[Rule 62-296.320(4)(b)1., F.A.C.]

D.4. Visible emissions from the flyash handling system and flyash silos are limited to 5% opacity.
[Power Plant Siting Certification PA 79-12]

D.5. Total maximum allowable emissions of particulate matter from the each silo baghouse shall not exceed 0.03 grains/DSCF, 5.16 lbs./hr. and 22.62 tons/yr. based on a design flow rate of 20,081 DSCFM. The requirement of formal particulate matter compliance testing as provided in specific condition D.6. shall be waived if the baghouse meets the alternative standard of 5% opacity. If the Department or the Environmental Protection Commission of Hillsborough County has reason to believe that the particulate weight emission standard is not being met, the agency shall require that compliance be demonstrated by EPA Method 17 specified in Rule 62-297, F.A.C.
[Rule 62-4.160(2) and Rule 62-297.620(4), F.A.C.; AO29-160255; AO29-161082]

Test Methods and Procedures

D.6. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the Tampa Electric Company shall have formal compliance tests conducted ~~on each~~on each silo baghouse for opacity and particulate matter and formal compliance test conducted on each silo truck loadout for opacity.
[Rule 62-297.310(7)(a)4., F.A.C.]

D.7. The test method for particulate emissions shall be EPA Method 17, with an acetone wash and an average stack temperature below 275 degrees Fahrenheit, or EPA Method 5 with an acetone wash. These test methods are incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(a)3.a.(ii) and 62-296.320(4)(a)3.c., F.A.C.]

D.8. The test methods for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.
[Rule 62-296.320(4)(b)4., F.A.C.]

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

~~A) Fly~~A) Fly ash transported by dump truck shall be adequately wetted and processed through the pugmill.
~~B) Dump~~B) Dump trucks used to transport fly ash shall utilize tarps at all times except when loading/unloading.
~~C) Fly~~C) Fly ash transported in a dry state shall be accomplished utilizing an enclosed tanker truck.
~~D) Fly~~D) Fly ash spilled and/or leaked on plant grounds shall be adequately wetted and disposed of daily.
~~E) Fly~~E) Fly ash collected from spills and/or leaks must be adequately wetted at all times.
~~F) Ensure~~F) Ensure the proper seating of the unloader chute onto the tanker inlet prior to loading.
~~G) Keep~~G) Keep the dust extractor operational during loading.
~~H) Close~~H) Close the tanker's inlet as soon as practical after the loading process.
I) Extend the tubing from the silo into the closed tanker type trucks during loadout.
J) Periodic watering of plant roads.
[Rule 62-296.320(4)(c)2., F.A.C., AO29-160255, and precautions specified in initial Title V application.]

D.10. Compliance testing for the silo and tanker truck loading operations shall be conducted under the following conditions:
a. All conveyance hoppers will be operational during the test.
b. All fly ash will be directed to the silo, no reinjection of fly ash to the boiler systems will occur during the test.
c. The boilers shall operate at the maximum capability of this unit under normal operating conditions during the test.
d. Two tanker trucks shall be loaded during the test. The loading valve shall be completely open during filling.
e. The visible emission test shall be at least 30 minutes in duration and the period of time during which truck loading occurred indicated on the test report.
[Rule 62-4.070(3), F.A.C.].

D.11. Compliance with the emission limitations of Specific Conditions Nos. 3 and 4 shall be determined using EPA Methods 1, 2, 4, 5 and 9 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 62-297.401, F.A.C. The Method 9 observation period for the silo and tanker truck loading operations shall be at least thirty (30) minutes in duration. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Rule 62-297, F.A.C. and 40 CFR 60, Appendix A.
[Rule 62-297, F.A.C.]

D.12. All compliance tests shall be conducted while loading the silo at approximately the maximum feed rate (24 hour average). Failure to submit the feed rate or operating at conditions during testing which do not reflect normal operating conditions may invalidate the data. [Rule 62-4.070(3), F.A.C.].

Subsection E. Flyash Silo No. 3
This section addresses the following Regulated Emissions Units:

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

Description

Fly Ash Silo No. 3 handles fly ash from Steam Generator Unit No. 4. Also, fly ash may be pneumatically conveyed from tanker trucks to Silo No. 3. Particulate matter emissions are ~~controlled by~~controlled by a 1,200 DSCFM Flex Kleen Model 84-WRTC-80-II-G baghouse.

The following conditions apply to the Emissions Unit listed above:

Essential Potential to Emit (PTE) Parameters

E.1. Particulate matter emissions from the flyash handling system and flyash silo shall not exceed 0.2 lb/hr.
[Power Plant Siting Certification PA 79-12; PSD-FL-040]

E.2. Visible emissions from the flyash handling system and the flyash silo are limited to 5% opacity.
[Power Plant Siting Certification PA 79-12]

E.3. The flyash handling system (including transfer and silo storage) will be maintained at negative pressures and vented to a control system.
[PSD-FL-040]

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

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

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

Descriptions

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

The following conditions apply to the Emissions Units listed above:

Essential Potential to Emit (PTE) Parameters

F.1. Total combined particulate matter emissions from the limestone handling hoppers/~~conveyors shall~~conveyors shall not exceed 0.65 lb/hr. Visible emissions are limited to 5% opacity. Compliance testing for particulate matter emissions is not required provided the opacity limit is maintained.
[PSD-FL-040; Power Plant Siting Certification PA 79-12]

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

F.3. All conveyors and conveyor transfer points shall be enclosed to preclude particulate matter emissions.
[PSD-FL-040]

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

F.5. Tampa Electric will perform an annual VE test to satisfy the periodic monitoring requirements of these conditions. In addition, the system pressure will be monitored quarterly to assess that the system is operating under negative pressure.
[USEPA objection resolution.]

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

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

Descriptions

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

The following conditions apply to the Emissions Units listed above:

Essential Potential to Emit (PTE) Parameters

G.1. Capacity.. The annual coal throughput shall not exceed 4,000 TPH per bunker.
[Rule 62-4.160(2), F.A.C.]

G.2. Hours of Operation. To show compliance with the annual allowable emission rate, the hours of bunker loading operation shall not exceed 4,167 hours per year.
[Rule 62-210.200, F.A.C., Definitions (PTE)]

Emission Limitations and Standards

G.3. Visible emissions from each unit shall ~~not be equal to or greater~~be less than 20% opacity. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rule 62-296.320(4)(b)1. and 4., F.A.C.]

G.4. Since a source of less than 1 TPY is exempt from particulate matter RACT provisions, the maximum allowable particulate emissions shall not exceed 0.99 tons per year from each cyclone exhaust. Also maximum allowable particulate matter emissions shall not exceed 0.48 lbs/hr from each cyclone exhaust.
[AO29-163788 to escape RACT]

G.5. The maximum allowable emission rate for particulate matter for this source is set by specific condition no. G.4. Because of the expense and complexity of conducting a stack test on minor sources of particulate matter, the Department hereby waives the requirement for a stack test. The alternative standard establishes a visible emission limitation not to exceed an opacity of 5%. Compliance with this alternate emission limitation shall be determined using DEP Method 9 contained in 62-297.401, F.A.C.
[AO29-163788]

G.6. Should the Department have reason to believe the particulate matter emission standard is not being met, the Department may require that compliance with the particulate emission standards be demonstrated by testing using EPA Methods 1, 2, 4 and 5 in accordance with 62-297.401, F.A.C.
[Rule 62-297.310(7)(b), F.A.C.]

G.7. Tampa Electric will monitor the hours of operation of coal bunker loading. In addition, Tampa Electric will perform an annual VE test to satisfy the periodic monitoring requirements of this condition.
[USEPA objection resolution.]

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

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

Descriptions

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

From the solid fuel yard, the solid fuel is conveyed to the tripper room where 2 trippers bunker the solid fuels into 4 solid fuel bunkers. Each unit has its own respective bunker. Solid fuel samples are taken every 15 minutes during bunking, and composited for analysis. From the bunkers, the solid fuel is gravity fed into 14 crushers, and then gravity fed into the boilers. There are 3 tall crushers, each for Unit Nos. 1 – 3, and 5 bowl crushers for Unit No. 4. From the crushers, the solid fuel is pneumatically fed into classifiers, two for each crusher for a total of 28 classifiers, and then into the respective boilers.

The following conditions apply to the Emissions Units listed above:

H.1. TEC shall maintain a daily log of the amounts and types of fuels used and copies of fuel analyses containing information on sulfur content, ash content and heating values.
[Power Plant Siting Certification PA 79-12]

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

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

(b~~) The~~) The permittee must submit to the Department within ten (10) working days after it becomes available, copies of technical data pertaining to the selected particulate emissions control for the coal handling facility. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of such device if the Department determines the selected control device to be inadequate to meet the emission limits specified in condition (a) above. Such disapproval shall be issued within 30 days of receipt of the technical data.

(c~~) The~~) The fuel pile operations are subject to Rule 62-296.310(3), F.A.C., Unconfined Emissions of Particulate Matter. Reasonable precautions to minimize unconfined particulate matter shall be in accordance with Rule 62-296.310(3)(c), F.A.C.,; and, may include, but shall not be limited to, the coating of roads and construction sites used by contractors and regrassing or watering areas of disturbed fuel.

(d~~) From~~) From each fuel transloading source/emissions point (i.e., off-loading and loading of fuel {for export from Big Bend Station}), the maximum hourly transloading transfer of fuel shall not exceed 4,000 tons, 24-hour rolling average.

(e~~) From~~) From each fuel transloading source/emissions point, (i.e., off-loading and loading of fuel {for export from Big Bend Station}), the maximum annual transloading transfer of fuel shall not exceed 1,428,030 tons.

(f~~) The~~) The number of railcars and trucks and the quantity of fuel loaded by each fuel transloading source/emissions point (i.e., off-loading and loading of fuel {for export from Big Bend Station*}) shall be recorded, maintained, and kept on fuel for a minimum of five years. The annual quantity of fuel loaded by each fuel transloading source/emissions point shall be submitted in the Annual Operation Report.
[Power Plant Siting Certification PA 79-12]
*Permitting Note.

H.3. All conveyors and conveyor transfer points shall be enclosed to preclude particulate matter emissions excepting the coal handling stacker reclaimer, the tail end conveyor feeding the tripper and the barge unloading belt which are exempted for feasibility considerations.
[PSD-FL-040]

H.4. Coal storage piles shall be shaped, compacted and oriented to minimize wind erosion.
[PSD-FL-040]

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

Subsection I. Surface Coating of Miscellaneous Metal Parts

This section addresses the following Regulated Emissions Units:

-032 Surface coating of miscellaneous metal parts

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

The following conditions apply to the Emissions Unit listed above:

I.1. Hours of Operation. Miscellaneous metal parts surface coating operations are allowed to operate for a total 3500 hours/year.
[Rule 62-210.200, F.A.C., Definitions (PTE)]

I.2. Capacity. The total maximum coating usage shall not exceed 2 gallons per hour, on a 24-hr basis, and 7000 gallons per year.
[Rule 62-210.200, F.A.C., Definitions (PTE)]

I.3. Recordkeeping. TEC shall maintain daily records of operations for the most recent 5 year period. The records shall be made available to the local, state, or federal air pollution agency upon request. The records shall include, but not be limited to, the following:
a. The rule number applicable to the operation for which the records are being maintained.
b. The application method and substrate type (metal, etc.).
c. The amount and type of adhesive, coatings (including catalyst and reducer for multicomponent coatings), solvent, and/or graphic arts material used at each point of application, including exempt compounds.
d. The VOC content as applied in each adhesive, coating, solvent, and/or graphic arts material.
e. The date for each application of each adhesive, coating, solvent, and/or graphic arts material.
f. The amount of surface preparation, ~~clean-up~~clean up, wash-up of solvent (including exempt compounds) used and the VOC content of each.
[Rule 62-296.500(2)(b)1., F.A.C.]

I.4. The VOC content shall be calculated using a percent solids basis (less water and exempt solvents) for adhesives, coating, and inks, using EPA Reference Method 24.
[Rule 62-296.500(2)(b)2., F.A.C.]

I.5. Reporting. Annually, in accordance with a schedule and reporting format provided by the Department or EPCHC, TEC shall provide EPCHC with proof of compliance with the limitations in this section.
[Rule 62-296.500(2)(c), F.A.C.]

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

I.6. Emissions Limits for surface coating of miscellaneous metal parts.
(a) No owner or operator of a coating line for miscellaneous metal parts and products shall cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of:
(1) 4.3 pounds per gallon of coating (0.52 kilograms per liter), excluding water, delivered to a coating applicator that applies clear coatings;
(2) 3.5 pounds per gallon of coating (0.42 kilograms per liter), excluding water, delivered to a coating applicator in coating application system that is air dried or forced warm air dried at temperatures up to 194 degrees Fahrenheit (90 degrees Celsius);
(3) 3.5 pounds per gallon of coating (0.42 kilograms per liter), excluding water, delivered to a coating applicator that applies extreme performance coatings; or,
(4) 3.0 pounds per gallon of coating (0.36 kilograms per liter), excluding water, delivered to a coating applicator for all other coatings and coating application systems.
(b) If more than one emission limitation in condition I.~~5~~6.(a) above applies to a specific coating, then the least stringent emission limitation shall be applied.
(c) All volatile organic compound emissions from solvent washings shall be considered in the emission limitations in condition I.6.(a) above unless the solvent is directed into containers that prevent evaporation into the atmosphere.
[Rule 62-296.513(2), F.A.C.]

I.7. Control Technology. The emission limits in condition I.6.(a) above shall be achieved by: The application of low solvent coating technology.
[Rule 62-296.513(3), F.A.C.]

I.8. Test Methods and Procedures to Determine Low Solvent Technology. The test method for volatile organic compounds shall be EPA Method 24 or EPA 450/3-84-019, incorporated and adopted by reference in Chapter 62-297, F.A.C. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.]
[Rules 62-296.513(4)(a) and (c), F.A.C.]

Subsection J. Abrasive Blasting

This section addresses the following Regulated Emissions Units:

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

Description

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

The following conditions apply to the Emissions Units listed above:

J.1. Capacity. The maximum annual usage of abrasive blast media in the abrasive blast booth shall not exceed 300 tons per year.
[Rules 62-4.160(2), 62-210.200(PTE)]

J.2. Hours of Operation. These emissions units are each allowed to operate continuously, i.e., 8760 hours/year.
[Rule 62-210.200, F.A.C., Definitions (PTE)]

J.3. Emission Limitations. The particulate matter emissions from each baghouse shall not exceed 0.03 gr/dscf, or any visible emissions greater than 5% opacity. However, TEC may exceed these emission limits ~~if a~~if a pollution control device for particulate matter is utilized that has an actual particulate matter collection efficiency of at least 98 percent. The opacity standard for the emissions units shall be the average opacity level achieved during the initial compliance test which established compliance with the standard, plus 5% opacity.
[Rules 62-296.712(2), F.A.C.]

J.4. Test Methods and Procedures.
(a~~) The~~) The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference by reference in Chapter 62-297, F.A.C.
(b~~) The~~) The test method for particulate matter emissions shall be EPA Method 5, incorporated and adopted by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet.
(c~~) A~~) A visible emissions test indicating no visible emissions (5 percent opacity) may be submitted in lieu of a particular stack test for materials handling emissions subject to this rule, where the emissions unit is equipped with a baghouse.
(d~~) Test~~) Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.
[Rule 62-296.712(3), F.A.C.]

J.5. Particulate matter emissions from the abrasive blasting operations shall not exceed 15 tons for any 12 consecutive month period.
[Rule 62-212.300, F.A.C.]

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

J.7. TEC shall maintain monthly records on the type and amount of abrasive blasting material used . A rolling 12-month total shall be kept as well.
[Rule 62-070(3), F.A.C.]

J.8. During each month that the Abrasive Blast Booth is used, a VE test must be performed. A monthly VE test is not required during any month that the Abrasive Blast Booth is not used. During each month that abrasive blast media is transferred to or from Abrasive Blast Media Storage, a VE test must be performed. A monthly VE test is not required during any month that no abrasive blast media is transferred to or from Abrasive Blast Media Storage. However, at a minimum, an annual VE test must be performed.

[USEPA objection resolution.]

Subsection K. Surface Coating of Ships

This section addresses the following Regulated Emissions Units:

-035 Surface coating of ships

Description
Surface coating maintenance of ships.

The following conditions apply to the Emissions Units listed above:

K.1. The emissions unit must comply with the attached 40 CFR 63 Subpart A – General Provisions modified for Subpart II.
[40 CFR 63 Subpart A, Rule 62-204.800, F.A.C.]

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

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

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

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

§ 63.781 Applicability.

(a) The provisions of this subpart apply to shipbuilding and ship repair operations at any facility that is a major source.

(b) The provisions of this subpart do not apply to coatings used in volumes of less than 200 liters (52.8 gallons) per year, provided the total volume of coating exempt under this paragraph does not exceed 1,000 liters per year (264 gallons per year) at any facility. Coatings exempt under this paragraph shall be clearly labeled as ''low-usage exempt,'' and the volume of each such coating applied shall be maintained in the facility's records.

(c) The provisions of this subpart do not apply to coatings applied with hand-held, nonrefillable, aerosol containers or to unsaturated polyester resin (i.e., fiberglass lay-up) coatings. Coatings applied to suitably prepared fiberglass surfaces for protective or decorative purposes are subject to this subpart.

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

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

40 CFR ~~63.783 Standards~~63.783 Standards

(a~~) No~~) No owner or operator of any existing or new affected source shall cause or allow the application of any coating to a ship with an as-applied VOHAP content exceeding the applicable limit given in Table 2 of this subpart (see attachment), as determined by the procedures described in 40 CFR 63.785(c)(1)-(4). For the compliance procedures described in 40 CFR 63.785(c)(1)-(3), VOC shall be used as a surrogate for VOHAP, and the EPA Reference Method 24 shall be used as the definitive measure for determining compliance. For the compliance procedure described in 40 CFR 63.785(c)(4), an alternative test method capable of measuring independent VOHAP shall be used to determine compliance. The method must be submitted to and approved by the Administrator.
[40 CFR 63.783(a)]

(b~~) Each~~) Each owner or operator of a new or existing affected source shall ensure that:

(1~~) All~~) All handling and transfer of VOHAP-containing materials to and from containers, tanks, vats, drums, and piping systems is conducted in a manner that minimizes spills.

(2~~) All~~) All containers, tanks, vats, drums, and piping systems are free of cracks, holes, and other defects and remain closed unless materials are being added to or removed from them.
[40 CFR 63.783(b)]

(c) Approval of alternative means of limiting emissions.

(1~~) The~~) The owner or operator of an affected source may apply to the Permitting authority for permission to use an alternative means (such as an add-on control system) of limiting emissions from coating operations. The application must include:

(i~~) An~~) An engineering material balance evaluation that provides a comparison of the emissions that would be achieved using the alternative means to those that would result from using coatings that comply with the limits in Table 2 of this section, or the results from an emission test that accurately measures the capture efficiency and control device efficiency achieved by the control system and the composition of the associated coatings so that the emissions comparison can be made;

(ii~~) A~~) A proposed monitoring protocol that includes operating parameter values to be monitored for compliance and an explanation of how the operating parameter values will be established through a performance test; and

(iii~~) Details~~) Details of appropriate recordkeeping and reporting procedures.

(2~~) The~~) The Permitting authority shall approve the alternative means of limiting emissions if, in the Permitting authority's judgment, postcontrol emissions of VOHAP per volume applied solids will be no greater than those from the use of coatings that comply with the limits in Table 2 of this section.

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

40 CFR ~~63.784 Compliance~~63.784 Compliance Dates
(a~~) Each~~) Each owner or operator of an existing affected source shall comply by 12/16/97.
[40 CFR 63.784(a)]

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

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

40 CFR ~~63.785 Compliance~~63.785 Compliance Procedures
(a~~) For~~) For each batch of coating that is received by an affected source, the owner or operator shall (see Figure 1 for a flow diagram of the compliance procedures):

(1~~) Determine~~) Determine the coating category and the applicable VOHAP limit as specified in 40 CFR 63.783(a).

(2~~) Certify~~) Certify the as-supplied VOC content of the batch of coating. The owner or operator may use a certification supplied by the manufacturer for the batch, although the owner or operator retains liability should subsequent testing reveal a violation. If the owner or operator performs the certification testing, only one of the containers in which the batch of coating was received is required to be tested.
[40 CFR 63.785(a)]

(b) (1) In lieu of testing each batch of coating, as applied, the owner or operator may determine compliance with the VOHAP limits using any combination of the procedures described in paragraphs (c)(1), (c)(2), (c)(3), and (c)(4) of this section. The procedure used for each coating shall be determined and documented prior to application.

(2~~) The~~) The results of any compliance demonstration conducted by the affected source or any regulatory agency using Method 24 shall take precedence over the results using the procedures in paragraphs (c)(1), (c)(2), or (c)(3) of this section.

(3~~) The~~) The results of any compliance demonstration conducted by the affected source or any regulatory agency using an approved test method to determine VOHAP content shall take precedence over the results using the procedures in paragraph (c)(4) of this section.
[40 CFR 63.785(b)]

(c) (1) Coatings to which thinning solvent will not be added. For coatings to which thinning solvent (or any other material) will not be added under any circumstance or to which only water is added, the owner or operator of an affected source shall comply as follows:

(i~~) Certify~~) Certify the as-applied VOC content of each batch of coating.

(ii~~) Notify~~) Notify the persons responsible for applying the coating that no thinning solvent may be added to the coating by affixing a label to each container of coating in the batch or through another means described in the implementation plan required in 40 CFR 63.787(b).

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

(2) Coatings to which thinning solvent will be added--coating-by-coating compliance. For a coating to which thinning solvent is routinely or sometimes added, the owner or operator shall comply as follows:

(i~~) Prior~~) Prior to the first application of each batch, designate a single thinner for the coating and calculate the maximum allowable thinning ratio (or ratios, if the affected source complies with the cold-weather limits in addition to the other limits specified in Table 2) for each batch as follows:

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

where:

R = Maximum allowable thinning ratio for a given batch (L thinner/L coating as supplied);

V_S = Volume fraction of solids in the batch as supplied (L solids/L coating as supplied);

VOHAP limit = Maximum allowable as-applied VOHAP content of the coating (g VOHAP/L solids);

m_{VOC} = VOC content of the batch as supplied [g VOC (including cure volatiles and exempt compounds on the HAP list)/L coating (including water and exempt compounds) as supplied];

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

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

$$V_s = 1 - \frac{m_{volatiles}}{D_{avg}} \qquad \text{Eqn. 2}$$

where:

$m_{volatiles}$ = Total volatiles in the batch, including VOC, water, and exempt compounds, (g/L coating); and

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

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

(ii~~) Prior~~) Prior to the first application of each batch, notify painters and other persons, as necessary, of the designated thinner and maximum allowable thinning ratio(s) for each batch of the coating by affixing a label to each container of coating or through another means described in the implementation plan required in 40 CFR 63.787(b).

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

(iv~~) By~~) By the 15th day of each calendar month, determine the total allowable volume of thinner for the coating used during the previous month as follows:

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

Eqn. 3

where:

V_{th}	=	Total allowable volume of thinner for the previous month (L thinner);
V_b	=	Volume of each batch, as supplied and before being thinned, used during non-cold-weather days of the previous month (L coating as supplied);
R_{cold}	=	Maximum allowable thinning ratio for each batch used during cold-weather days (L thinner/L coating as supplied);
$V_{b\text{-}cold}$	=	Volume of each batch, as supplied and before being thinned, used during cold-weather days of the previous month (L coating as supplied);
i	=	Each batch of coating; and
n	=	Total number of batches of the coating.

(v~~) By~~) By the 15th day of each calendar month, determine the volume of thinner actually used with the coating during the previous month.

(vi~~) If~~) If the volume of thinner actually used with the coating [paragraph (c)(3)(v) of this section] is less than or equal to the total allowable volume of thinner for the coating [paragraph (c)(3)(iv) of this section], then compliance is demonstrated for the coating for the previous month, unless a violation is revealed using Method 24.

(3) Coatings to which the same thinning solvent will be added--group compliance. For coatings to which the same thinning solvent (or other material) is routinely or sometimes added, the owner or operator shall comply as follows:

(i~~) Designate~~) Designate a single thinner to be added to each coating during the month and "group" coatings according to their designated thinner.

(ii~~) Prior~~) Prior to the first application of each batch, calculate the maximum allowable thinning ratio (or ratios, if the affected source complies with the cold-weather limits in addition to the other limits specified in Table 2) for each batch of coating in the group using the equations in paragraph (c)(2) of this section.

(iii~~) Prior~~) Prior to the first application of each "batch," notify painters and other persons, as necessary, of the designated thinner and maximum allowable thinning ratio(s) for each batch in the group by affixing a label to each container of coating or through another means described in the implementation plan required in 40 CFR 63.787(b).

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

(v~~) By~~) By the 15th day of each calendar month, determine the total allowable volume of thinner for the group for the previous month using Equation 3.

(vi~~) By~~) By the 15th day of each calendar month, determine the volume of thinner actually used with the group during the previous month.

(vii~~) If~~) If the volume of thinner actually used with the group [paragraph (c)(3)(vi) of this section] is less than or equal to the total allowable volume of thinner for the group [paragraph (c)(3)(v) of this section], then compliance is demonstrated for the group for the previous month, unless a violation is revealed using Method 24.

(4) Demonstration of compliance through an alternative (i.e., other than Method 24) test method. The owner or operator shall comply as follows:

(i~~) Certify~~) Certify the as-supplied VOHAP content (g VOHAP/L solids) of each batch of coating.

(ii~~) If~~) If no thinning solvent will be added to the coating, the owner or operator of an affected source shall follow the procedure described in 40 CFR 63.785(c)(1), except that VOHAP content shall be used in lieu of VOC content.

(iii~~) If~~) If thinning solvent will be added to the coating, the owner or operator of an affected source shall follow the procedure described in 40 CFR 63.785(c)(2) or (3), except that in Equation 1~~: the~~: the term "m_{VOC}" shall be replaced by the term "m_{VOHAP}," defined as the VOHAP content of the coating as supplied (g VOHAP/L coating) and the term "D_{th}" shall be replaced by the term "$D_{th(VOHAP)}$" defined as the average density of the VOHAP thinner(s) (g/L).
[40 CFR 63.785(c)]

(d) A violation revealed through any approved test method shall result in a 1-day violation for enforcement purposes. A violation revealed through the recordkeeping procedures described in paragraphs (c)(1) through (c)(4) of this section shall result in a 30-day violation for enforcement purposes, unless the owner or operator provides sufficient data to demonstrate the specific days during which noncompliant coatings were applied.
[40 CFR 63.785(d)]

40 CFR ~~63.786 Test~~63.786 Test Methods and Procedures

(a~~) For~~) For the compliance procedures described in 40 CFR 63.785(c)(1)-(3), Method 24 of 40 ~~CFR part~~CFR part 60, appendix A, is the definitive method for determining the VOC content of coatings, as supplied or as applied. When a coating or thinner contains exempt compounds that are volatile HAP or VOHAP, the owner or operator shall ensure, when determining the VOC content of a coating, that the mass of these exempt compounds is included.
[40 CFR 63.786(a)]

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

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

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

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

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

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

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

(c~~) A~~) A coating manufacturer or the owner or operator of an affected source may use batch formulation data as a test method in lieu of Method 24 to certify the as-supplied VOC content of a coating if the manufacturer or the owner or operator has determined that batch formulation data have a consistent and quantitatively known relationship to Method 24 results. This determination shall consider the role of cure volatiles, which may cause emissions to exceed an amount based solely upon coating formulation data. Notwithstanding such determination, in the event of conflicting results, Method 24 shall take precedence. [40 CFR 63.786(c)]

(d~~) Each~~) Each owner or operator of an affected source shall use or ensure that the manufacturer uses the form and procedures mentioned in appendix A of this subpart to determine values for the thinner and coating parameters used in Equations 1 and 2. The owner or operator shall ensure that the coating/thinner manufacturer (or supplier) provides information on the VOC and VOHAP contents of the coatings/thinners and the procedure(s) used to determine these values.
[40 CFR 63.786(d)]

40 CFR ~~63.787 Notification~~63.787 Notification Requirements

(a~~) Each~~) Each owner or operator of an affected source shall comply with all applicable notification requirements in 40 CFR 63.9(a)-(d) and (i)-(j) of subpart A (General Provisions), with the exception that the deadline specified in 40 CFR 63.9(b)(2) and (3) shall be extended from 120 days to 180 days. Any owner or operator that receives approval pursuant to 40 CFR 63.783(c) of this subpart to use an add-on control system to control coating emissions shall comply with the applicable requirements of 40 CFR 63.9(e)-(h) of subpart A.
[40 CFR 63.787(a)]

(b) Implementation plan. The provisions of 40 CFR 63.9(a) (Notification requirements/Applicability and general information) of subpart A apply to the requirements of this paragraph.

(1~~) Each~~) Each owner or operator of an affected source shall:

(i~~) Prepare~~) Prepare a written implementation plan that addresses each of the subject areas specified in paragraph (b)(3) of this section; and

(ii~~) Not~~) Not later than December 16, 1996, submit the implementation plan to the Administrator along with the notification required by 40 CFR 63.9(b)(2) or (5) of subpart A, as applicable.

(2) [Reserved]

(3~~) *Implementation*~~) *Implementation plan contents*. Each implementation plan shall address the following subject areas:

(i~~) *Coating*~~) Coating *compliance procedures*. The implementation plan shall include the compliance procedure(s) under 40 CFR 63.785(c) that the source intends to use.

(ii~~) *Recordkeeping*~~) *Recordkeeping procedures*. The implementation plan shall include the procedures for maintaining the records required under 40 CFR 63.788, including the procedures for gathering the necessary data and making the necessary calculations.

(iii~~) *Transfer*~~) *Transfer, handling, and storage procedures*. The implementation plan shall include the procedures for ensuring compliance with 40 CFR 63.783(b).

(4~~) *Major*~~) *Major sources that intend to become area sources by the compliance date*. Existing major sources that intend to become area sources by the December 16, 1997 compliance date may choose to submit, in lieu of the implementation plan required under paragraph (b)(1) of this section, a statement that, by the compliance date, the major source intends to obtain and comply with federally enforceable limits on their potential to emit which make the facility an area source.
[40 CFR 63.787(b)]

40 CFR ~~63.788 Recordkeeping~~63.788 Recordkeeping and reporting requirements.

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

(b) Recordkeeping requirements.

(1~~) Each~~) Each owner or operator of a major source shipbuilding or ship repair facility having surface coating operations with less than 1000 liters (264 gallons) annual marine coating usage shall record the total volume of coating applied at the source to ships. Such records shall be compiled monthly and maintained for a minimum of 5 years.

(2~~) Each~~) Each owner or operator of an affected source shall compile records on a monthly basis and maintain those records for a minimum of 5 years. At a minimum, these records shall include:

(i~~) All~~) All documentation supporting initial notification;

(ii~~) A~~) A copy of the affected source's approved implementation plan;

(iii~~) The~~) The volume of each low-usage-exempt coating applied;

(iv~~) Identification~~) Identification of the coatings used, their appropriate coating categories, and the applicable VOHAP limit;

(v~~) Certification~~) Certification of the as-supplied VOC content of each batch of coating;

(vi) A determination of whether containers meet the standards as described in 40 CFR 63.783(b)(2); and

(vii~~) The~~) The results of any Method 24 or approved VOHAP measurement test conducted on individual containers of coating, as applied.

(3~~) The~~) The records required by paragraph (b)(2) of this section shall include additional information, as determined by the compliance procedure(s) described in 40 CFR 63.785(c) that each affected source followed:

(i) Coatings to which thinning solvent will not be added. The records maintained by facilities demonstrating compliance using the procedure described in 40 CFR 63.785(c)(1) shall contain the following information:

(A~~) Certification~~) Certification of the as-applied VOC content of each batch of coating; and

(B~~) The~~) The volume of each coating applied.

(ii) Coatings to which thinning solvent will be added--coating-by-coating compliance. The records maintained by facilities demonstrating compliance using the procedure described in 40 CFR 63.785(c)(2) shall contain the following information:

(A~~) The~~) The density and mass fraction of water and exempt compounds of each thinner and the volume fraction of solids (nonvolatiles) in each batch, including any calculations;

(B~~) The~~) The maximum allowable thinning ratio (or ratios, if the affected source complies with the cold-weather limits in addition to the other limits specified in Table 2 of this subpart) for each batch of coating, including calculations;

(C~~) If~~) If an affected source chooses to comply with the cold-weather limits, the dates and times during which the ambient temperature at the affected source was below 4.5°C (40°F) at the time the coating was applied and the volume used of each batch of the coating, as supplied, during these dates;

(D~~) The~~) The volume used of each batch of the coating, as supplied;

(E~~) The~~) The total allowable volume of thinner for each coating, including calculations; and

(F~~) The~~) The actual volume of thinner used for each coating.

(iii) Coatings to which the same thinning solvent will be added--group compliance. The records maintained by facilities demonstrating compliance using the procedure described in 40 CFR 63.785(c)(3) shall contain the following information:

(A~~) The~~) The density and mass fraction of water and exempt compounds of each thinner and the volume fraction of solids in each batch, including any calculations;

(B~~) The~~) The maximum allowable thinning ratio (or ratios, if the affected source complies with the cold-weather limits in addition to the other limits specified in Table 2) for each batch of coating, including calculations;

(C~~) If~~) If an affected source chooses to comply with the cold-weather limits, the dates and times during which the ambient temperature at the affected source was below 4.5°C (40°F) at the time the coating was applied and the volume used of each batch in the group, as supplied, during these dates;

(D~~) Identification~~) Identification of each group of coatings and their designated thinners;

(E~~) The~~) The volume used of each batch of coating in the group, as supplied;

(F~~) The~~) The total allowable volume of thinner for the group, including calculations; and

(G~~) The~~) The actual volume of thinner used for the group.

(iv) Demonstration of compliance through an alternative (i.e., non-Method 24) test method. The records maintained by facilities demonstrating compliance using the procedure described in 40 CFR 63.785(c)(4) shall contain the following information:

(A~~) Identification~~) Identification of the Permitting authority-approved VOHAP test method or certification procedure;

(B~~) For~~) For coatings to which the affected source does not add thinning solvents, the source shall record the certification of the as-supplied and as-applied VOHAP content of each batch and the volume of each coating applied;

(C~~) For~~) For coatings to which the affected source adds thinning solvent on a coating-by-coating basis, the source shall record all of the information required to be recorded by paragraph (b)(3)(ii) of this section; and

(D~~) For~~) For coatings to which the affected source adds thinning solvent on a group basis, the source shall record all of the information required to be recorded by paragraph (b)(3)(iii) of this section.

(4~~) If~~) If the owner or operator of an affected source detects a violation of the standards specified in 40 CFR 63.783, the owner or operator shall, for the remainder of the reporting period during which the violation(s) occurred, include the following information in his or her records:

(i~~) A~~) A summary of the number and duration of deviations during the reporting period, classified by reason, including known causes for which a ~~Federally-approved~~Federally approved or promulgated exemption from an emission limitation or standard may apply.

(ii~~) Identification~~) Identification of the data availability achieved during the reporting period, including a summary of the number and total duration of incidents that the monitoring protocol failed to perform in accordance with the design of the protocol or produced data that did not meet minimum data accuracy and precision requirements, classified by reason.

(iii~~) Identification~~) Identification of the compliance status as of the last day of the reporting period and whether compliance was continuous or intermittent during the reporting period.

(iv~~) If~~) If, pursuant to paragraph (b)(4)(iii) of this section, the owner or operator identifies any deviation as resulting from a known cause for which no Federally-approved or promulgated exemption from an emission limitation or standard applies, the monitoring report shall also include all records that the source is required to maintain that pertain to the periods during which such deviation occurred and:

(A~~) The~~) The magnitude of each deviation;

(B~~) The~~) The reason for each deviation;

(C~~) A~~) A description of the corrective action taken for each deviation, including action taken to minimize each deviation and action taken to prevent recurrence; and

(D~~) All~~) All quality assurance activities performed on any element of the monitoring protocol.

[40 CFR 63.788(b)]

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

[40 CFR 63.788(c)]

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

This section addresses the following Regulated Emissions Units:

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

Description

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

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

The following conditions apply to the Emissions Units listed above:

OPERATIONAL REQUIREMENTS

L.1. Hours of Operation: These emissions units may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200, F.A.C., Definitions-potential to emit (PTE)]

L.2. Enclosure of Equipment: All conveyors and conveyor transfer points shall be enclosed and exhaust from this equipment shall be directed to a baghouse to minimize particulate matter emissions. [62-4.070(3),F.A.C.]

L.3. Operating Procedures: Enclosures and baghouses for these emissions units shall be properly operated and maintained at all times in a condition to minimize particulate emissions. The owner and operator shall ensure that all facility staff responsible for these emissions units are trained in their operation and maintenance in accordance with the guidelines and procedures as established by the equipment manufacturers. [Rule 62-4.070(3), F.A.C.]

EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

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

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

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

L.5. Visible Emissions Tests: Compliance with the visible emission limits of this permit shall be demonstrated by an annual compliance test using EPA Method 9. The duration of initial tests shall be three hours and the duration of subsequent annual tests shall be thirty minutes. [Rules 62-4.070(3) and 62-297.310(4)(a)2., F.A.C., and 40 CFR 60.11(b)]

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

L.6. Visible Emissions Tests in Lieu of Stack Tests, Emissions Unit 020: After passing the initial test required by specific condition 21 of this section, the owner or operator is permitted to comply with the visible emission limit of specific condition 16 and the testing requirement of specific condition 17 of this section in lieu of regularly demonstrating compliance with the limitations of 40 CFR 60.672(a)(1) and (2) and the particulate matter limitation of specific condition 16 of this section. If the Department has reason to believe that the particulate weight emission limit of 40 CFR 60.672(a)(1) or the particulate matter limitation of specific condition 16 of this section is not being met, it shall require compliance be demonstrated by the test method specified by 40 CFR 60.675. [Rules 62-4.070(3) and 62-297.620(4), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

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

NSPS SUBPART OOO REQUIREMENTS

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

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

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

(a) No owner or operator shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:

(1) Contain particulate matter in excess of 0.05 g/dscm; and

(2) Exhibit greater than 7 percent opacity.

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

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

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

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

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

(b) The owner or operator shall determine compliance with the particulate matter standards in 40 CFR 60.672(a) as follows:

(1) Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 °C (250 °F), to prevent water condensation on the filter.

(2) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

[Note: The owner or operator is required to demonstrate compliance with the particulate matter emission limitation of 40 CFR 60.672(a)(1) by performing and passing an initial particulate matter test in accordance with the requirements of this section, unless such requirement is waived by the US Environmental Protection Agency. No subsequent regular annual particulate matter testing is required. The owner or operator is permitted to comply with the visible emission limit of specific condition 16 of this section in lieu of regularly demonstrating compliance with the limitations of 40 CFR 60.672(a)(1) and (2). See also specific condition 18 of this section.]

(c) (2~~) In~~) In determining compliance with the opacity of stack emissions from any baghouse that controls emissions only from an individual enclosed storage bin under 40 CFR 60.672(f) of this subpart, using Method 9, the duration of the Method 9 observations shall be 1 hour (ten 6-minute averages).

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

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

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

(f) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted to demonstrate compliance with the standards set forth in 40 CFR 60.672 of this subpart.

(h) The subpart A requirement under 40 CFR 60.7(a)(2) for notification of the anticipated date of initial startup of an affected facility shall be waived for owners or operators of affected facilities regulated under this subpart.

(i) A notification of the actual date of initial startup of each affected facility shall be submitted to the Administrator.

(1) For a combination of affected facilities in a production line that begin actual initial startup on the same day, a single notification of startup may be submitted by the owner or operator to the Administrator. The notification shall be postmarked within 15 days after such date and shall

include a description of each affected facility, equipment manufacturer, and serial number of the equipment, if available.

L.11. The attached 40 CFR 60 Subpart A NSPS General Provisions also apply to these emissions units.

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

This section addresses the following Regulated Emissions Units:

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

Description

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

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

The following conditions apply to the Emissions Unit listed above:

OPERATIONAL REQUIREMENTS

M.1. Hours of Operation~~: This~~: This emissions units may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200, F.A.C., Definitions-potential to emit (PTE)]

M.2. Operating Procedures: The baghouse for this emissions unit shall be properly operated and maintained at all times in a condition to minimize particulate emissions. The owner and operator shall ensure that all facility staff responsible for these emissions units are trained in their operation and maintenance in accordance with the guidelines and procedures as established by the equipment manufacturers. [Rule 62-4.070(3), F.A.C.]

EMISSION LIMITATIONS AND PERFORMANCE STANDARDS

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

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

COMPLIANCE MONITORING AND TESTING REQUIREMENTS

M.4. Visible Emissions Tests: Compliance with the visible emission limit of this permit shall be demonstrated by an annual compliance test using EPA Method 9. The duration of annual tests shall be thirty minutes. [Rules 62-4.070(3) and 62-297.310(4)(a)2., F.A.C.]

M.5. Visible Emissions Tests in Lieu of Stack Tests: The owner or operator is permitted to comply with the visible emission limit of specific condition 25 and the testing requirement of specific condition 26 of this section in lieu of regularly demonstrating compliance with the particulate matter limitation of specific condition 25 of this section. If the Department has reason to believe that the particulate matter limitation of specific condition 25 of this section is not being met, it shall require compliance be demonstrated by conducting a particulate matter test in accordance with EPA Method 5 specified at 40 CFR 60 Appendix A. [Rules 62-4.070(3) and 62-297.620(4), F.A.C.]

REPORTING AND RECORD KEEPING REQUIREMENTS

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

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

Subsection N. Common Conditions

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

N.1. Compliance Test Notification. TECO shall notify the EPCHC, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for TECO.
[Rule 62-297.310(7)(a)9., F.A.C.]

N.2. Special Compliance Tests. When, after inspection, the Department or the Environmental Protection Commission of Hillsborough County has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the Tampa Electric Company to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emission unit and to provide a report on the results of said test to the requesting agency.
[Rule 62-297.310(7)(b), F.A.C.]

GENERAL TEST REQUIREMENTS

N.3. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 297.310(1), F.A.C.]

N.4. Operating Rate During Testing for Emission Units other than Combustion Turbines. Unless otherwise stated an emission unit's specific condition in this permit, testing of emissions shall be conducted with the emissions unit operation at 90 to 100 percent of the maximum operation rate allowed by specific condition in this permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rule 62-297.310(2), F.A.C.]

N.5. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.]

N.6. Applicable Test Procedures.

(*a) Required Sampling Time.*

1. Unless otherwise specified in the specific conditions of this permit, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(*b) Minimum Sample Volume*. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

(*c) Required Flow Rate Range*. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(*d) Calibration of Sampling Equipment*. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1 (see attachment).

(*e) Allowed Modification to EPA Method 5*. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 297.310(4), F.A.C.]

N.7. Determination of Process Variables.

(*a) Required Equipment.* The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(*b) Accuracy of Equipment*. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales,

shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
[Rule 62-297.310(5), F.A.C.]

N.8. Frequency of Compliance Tests. The following provisions apply to those emissions units that are subject to an emissions limiting standard for which compliance testing is required, unless otherwise provided in a specific emission unit condition of this permit.

(a) General Compliance Testing.

1. The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

a. Did not operate; or

b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

a. Visible emissions, if there is an applicable standard;

b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and

c. Each NESHAP pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

6. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup.

7. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup.

8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.

9. The owner or operator shall notify the Department and the Environmental Protection Commission of Hillsborough County, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

10. An annual compliance test conducted for visible emissions shall not be required for units exempted from permitting at Rule 62-210.300(3)(a), F.A.C., or units permitted under the General Permit provisions at Rule 62-210.300(4), F.A.C.

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

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

N.9. Test Reports.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department and the EPCHC on the results of each such test.

(b) The required test report shall be filed with the EPCHC as soon as practical but no later than 45 days after the last sampling run of each test is completed.

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the EPCHC and the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.

9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.

10. The number of points sampled and configuration and location of the sampling plane.

11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.

12. The type, manufacturer and configuration of the sampling equipment used.

13. Data related to the required calibration of the test equipment.

14. Data on the identification, processing and weights of all filters used.

15. Data on the types and amounts of any chemical solutions used.

16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.

17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.

18. All measured and calculated data required to be determined by each applicable test procedure for each run.

19. The detailed calculations for one run that relate the collected data to the calculated emission rate.

20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.

21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the EPCHC or the Department, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

Section IV. This section is the Phase II Acid Rain Part.
Operated by: Tampa Electric Company
ORIS code: 0645

The emissions units listed below are regulated under Acid Rain:

E.U. ID No.	**Brief Description**
-001	Unit No. 1 Steam Generator [EPA ID #: BB01]
-002	Unit No. 2 Steam Generator [EPA ID #: BB02]
-003	Unit No. 3 Steam Generator [EPA ID #: BB03]
-004	Unit No. 4 Steam Generator [EPA ID #: BB04]

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

DEP Form No. 62-210.900(1)(a), version 07/01/95, received 12/26/95 (signed 12/19/95).
DEP Form No. 62-210.900(1)(a)4., F.A.C., received 12/22/99 (signed 12/20/99).
DEP Form No. 62-210.900(1)(a)5., F.A.C., received 12/22/99 (signed 12/20/99).

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

2. Sulfur dioxide (SO_2) allowance allocations and nitrogen oxide (NO_X) requirements for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID		Year				
			2000	2001	2002	2003	2004
-001	BB01	SO_2 allowances, under Table 2 of 40 CFR 73	12132*	12132*	12132*	12132*	12132*
		NO_X limit**	Note: The applicable emission limitation, under 40 CFR 76.6(a)(~~2~~3), is **0.84** lb/mmBtu. **2.a.** Pursuant to 40 CFR 76.11, the Florida Department of Environmental Protection approves the NO_X emissions averaging plan submitted on 12/22/99 for this unit. Under the plan, this unit's NO_X emissions shall not exceed the annual average alternative contemporaneous emission limitation of **0.74** lb/MMBtu. In addition, this unit shall not have an annual heat input less than **23,000,000** MMBtu.				

E.U. ID No.	EPA ID		Year				
			2000	2001	2002	2003	2004
-002	BB02	SO_2 allowances, under Table 2 of 40 CFR 73	12196*	12196*	12196*	12196*	12196*
		NO_X limit**	Note: The applicable emission limitation, under 40 CFR 76.6(a)(~~2~~3), is **0.84** lb/mmBtu. **2.b.** Pursuant to 40 CFR 76.11, the Florida Department of Environmental Protection approves the NO_X emissions averaging plan submitted on 12/22/99 for this unit. Under the plan, this unit's NO_X emissions shall not exceed the annual average alternative contemporaneous emission limitation of **0.74** lb/MMBtu. In addition, this unit shall not have an annual heat input less than **24,000,000** MMBtu.				
-003	BB03	SO_2 allowances, under Table 2 of 40 CFR 73	11444*	11444*	11444*	11444*	11444*
		NO_X limit**	Note: The applicable emission limitation, under 40 CFR 76.6(a)(~~2~~3), is **0.84** lb/mmBtu. **2.c.** Pursuant to 40 CFR 76.11, the Florida Department of Environmental Protection approves the NO_X emissions averaging plan submitted on 12/22/99 for this unit. Under the plan, this unit's NO_X emissions shall not exceed the annual average alternative contemporaneous emission limitation of **0.53** lb/MMBtu. In addition, this unit shall not have an annual heat input less than **10,000,000** MMBtu.				

E.U. ID No.	EPA ID		Year				
			2000	2001	2002	2003	2004
-004	BB04	SO_2 allowances, under Table 2 of 40 CFR 73	8780*	8780*	8780*	8780*	8780*
		NO_X limit**	Note: The applicable emission limitation, under 40 CFR 76.~~6~~5(a)(~~2~~1), is **0.45** lb/mmBtu. **2.d.** Pursuant to 40 CFR 76.11, the Florida Department of Environmental Protection approves the NO_X emissions averaging plan submitted on 12/22/99 for this unit. Under the plan, this unit's NO_X emissions shall not exceed the annual average alternative contemporaneous emission limitation of **0.44** lb/MMBtu. In addition, this unit shall not have an annual heat input less than **20,000,000** MMBtu.				

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

2.e. Additional Requirements

i. Under the plan (NO_X Phase II averaging plan), the actual Btu-weighted annual average NO_X emission rate for the units in the plan shall be less than or equal to the Btu-weighted annual average NO_X emission rate for the same units had they each been operated, during the same period of time, in accordance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then this unit shall be deemed to be in compliance for that year with its alternative contemporaneous annual emission limitation and annual heat input limit.

ii. In addition to the described NO_X compliance plan, these units shall comply with all other applicable requirements of 40 CFR Part 76, including the duty to reapply for a NO_X compliance plan and requirements covering excess emissions.

3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

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

b. No limit shall be places on the number of allowances held by the source under the Federal Acid Rain Program.

c. Allowances shall be accounted for under the Federal Acid Rain Program.

[Rule 62-213.440(1)(c), F.A.C.]

4. Fast-Track Revisions of Acid Rain Parts. Those Acid Rain sources making a change described at Rule 62-214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, F.A.C.
[Rules 62-213.413 and 62-214.370(4), F.A.C.]

5. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400, F.A.C.
[40 CFR 70.6(a)(4)(i); and, Rule 62-213.440(1)(c)1., F.A.C.]

6. Where an applicable requirement of the Act is more stringent than applicable regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.
[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, F.A.C., Definitions – Applicable Requirements.]

7. Comments, notes, and justifications:
The designated representative was changed to Gregory M. Nelson, P.E., effective July 1, 1998.