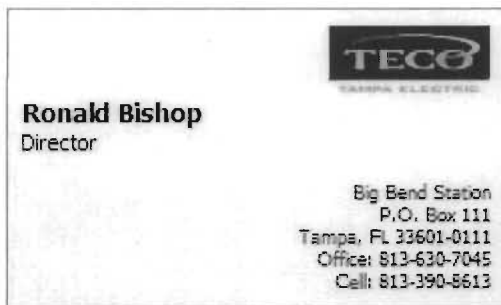


Livingston, Sylvania

From: Bishop, Ron D. [rdbishop@tecoenergy.com]
Sent: Wednesday, January 07, 2009 3:04 PM
To: Livingston, Sylvania; Ward, Julie M.
Cc: Zwolak, Karen O.
Subject: RE: TECO-BIG BEND STATION; 0570039-041-AC
Attachments: Ronald Bishop.vcf

I have received the attached permit documents.

Thank You,



From: Livingston, Sylvania [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Wednesday, January 07, 2009 9:06 AM
To: Bishop, Ron D.; Ward, Julie M.
Subject: FW: TECO-BIG BEND STATION; 0570039-041-AC

We have not received confirmation that you were able to access the documents attached to this December 31st e-mail, as well as the documents provided in the link (http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0570039.041.AC.F_pdf.zip) referenced in the email. Please confirm receipt by opening the attachment and clicking on the link to the permit documents, and sending a reply to me.

The Division of Air Resource Management is sending electronic versions of these documents rather than sending them Return Receipt Requested via the US Postal service. Your "receipt confirmation" reply serves the same purpose as tracking the receipt of the signed "Return Receipt" card from the US Postal Service. Please let me know if you have any questions.

Thanks,

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-9506
sylvia.livingston@dep.state.fl.us

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

From: Livingston, Sylvia
Sent: Wednesday, December 31, 2008 4:24 PM
To: 'rbishop@tecoenergy.com'
Cc: 'jmward@tecoenergy.com'; 'atnguyen@tecoenergy.com'; 'campbell@epchc.org'; 'Lee@epchc.org'; Nasca, Mara; 'forney.kathleen@epa.gov'; Gibson, Victoria; Arif, Syed; Holladay, Cleve
Subject: TECO-BIG BEND STATION; 0570039-041-AC

Dear Sir/ Madam:

Attached is the official **Notice of Final Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send". **We must receive verification that you are able to access the documents.** Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0570039.041.AC.F_pdf.zip

Owner/Company Name: TAMPA ELECTRIC COMPANY
Facility Name: BIG BEND STATION
Project Number: 0570039-041-AC
Permit Status: FINAL
Permit Activity: CONSTRUCTION
Facility County: HILLSBOROUGH
Processor: Cleve Holladay

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "*Air Permit Documents Search*" website at <http://www.dep.state.fl.us/air/eproducts/apds/default.asp> .

Permit project documents are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation at (850)488-0114.

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-9506
sylvia.livingston@dep.state.fl.us

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <http://www.adobe.com/products/acrobat/readstep.html> .



LETTER OF TRANSMITTAL

To: Elizabeth Walker
 Florida Department of
 Environmental Protection
 111 South Magnolia Drive, Suite 4
 Tallahassee, FL 32301

Date: 9/22/08

RECEIVED

SEP 24 2008

BUREAU OF AIR REGULATION

Dear Madam, the following are: attached sent separately

1 Original Reproducibles
 Drawings Specifications
 Documents PE Signature Document

Status		Sent for Your
<input checked="" type="checkbox"/> Final	<input type="checkbox"/> Approved	<input checked="" type="checkbox"/> Use
<input type="checkbox"/> Preliminary	<input type="checkbox"/> Not Approved	<input type="checkbox"/> Files
<input type="checkbox"/>	<input type="checkbox"/> Approved as Noted	<input type="checkbox"/>

Attached are the following:

<u>Document No.</u>	<u>Title</u>	<u>Issue</u>
EPSAP 2035-1	BBS Railcar Unloading AC Application	

If you have any questions contact me at 813.228.1282 .

Sincerely,

Byron T. Burrows, P.E. BCEE
 Manager, Air Programs

Cc: Julie Ward
 Karen Sheffield
 Karen Zwolak
 File AP 1.38

Electronic Permit Submittal and Processing System (EPSAP) Professional Engineer Signature Document

"This document is signed and sealed to secure the data in this permit application and any attached files that were submitted electronically as described in Florida Department of Business and Professional Regulation, Board of Professional Engineers, Procedures for Signing and Sealing Electronically Transmitted Plan, Specifications, Reports or other Documents, Rule 61G15-23.003., F.A.C.."

EPSAP Application Number: 2035-1
Facility Identification Number: 0570039
Facility Owner/Company Name: TAMPA ELECTRIC COMPANY

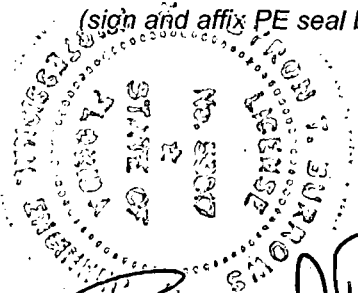
Purpose of Application:
 Air construction permit.

Signature File Created: 9/18/2008 5:23:05 PM

File Description	Authentication Code
Submitted Application Data	6DE63B1346266126D0C28F98BECBF4827A2A6A1B
Uploaded Facility Documents:	
Attachment D.doc	1EA46A04CE69E3981D463CAF332BC1606AA7F13A
Attachment C - Desc. of Mod.doc	6CCB5ABD09D223F08F5D5428F2595D67CA39E2D7
BB RAIL PLOT PLAN WEST 091808.pdf	04DE14FD0084CBE07C53BF0AC69E2B8199F6F110
BB RAIL PLOT PLAN EAST 091808.pdf	88D5735C7AD399B2EAEA1E925F0711785B5841DB
Uploaded Emissions Unit Documents:	
Attachment E - Control Equipment.doc	EB4285B68EE9015ACA45F024BFFEEA97A164950F
Attachment B - Flow Diagram.pdf	6F49956D58DA11C8CB615FD3F0C67CC2763A1669
Attachment A - Emissions.pdf	E7625C78259B5CCC3E990C6A31836E5E1B4DF4BD
Final Signature File	A24B28C8F92C80D5E712ABF089AB34CE4AFAD87F

Professional Engineer (PE): BYRON BURROWS License No: 53817

(sign and affix PE seal below)



(Handwritten Signature)

PE Signature

9/18/08

Date

RECEIVED

SEP 24 2008

BUREAU OF AIR REGULATION



APPLICATION IDENTIFICATION INFORMATION

Home | Reports | Comments | Application Search | Logoff | Help

APPLICATION: BIG BEND RAILCAR (#2035-1)
FACILITY: TAMPA ELECTRIC COMPANY (#0570039)

(+) 10 - SOLID FUEL YARD

- Assign Rights or Transfer Application
Edit Application for Sufficiency
Return Application to Applicant for Resubmittal

Application Contact | Owner/Authorized Rep. | Professional Engineer | Responsible Official

Final PE Signature File Authentication Code: A24B28C8F92C80D5E712ABF089AB34CE4AFAD87F
Select an Option Below to Confirm Receipt of the PE Signature Document:
I have NOT received the PE Signature Document.
I have received the PE Signature Document and confirmed that the Signature File Authentication Code shown above exactly matches the one on the PE Signature Document.
I have received the PE Signature Document and found that the Signature File Authentication Code shown above does NOT match the one on the PE Signature Document.

Permit Number: 0570039 - 041 - AC Update

Allow Public Viewing of this Application? No yo

Application Number: 2035

Applicant's Version: 1

Application Name: BIG BEND RAILCAR

Application Type: LONG FORM

Purpose of Application: AIR CONSTRUCTION PERMIT.

Time Clock Waiver: NO

Date Submitted: 9/22/2008

Applicant's Data Downloaded from ARMS? YES

Applicant Comment: The Big Bend Rail unloading project is the subject of this modification application. The project will be a continuous 4000 ton per hour rail unloading facility. A bottom dump unloading hopper will be located along the existing railroad track alignment. The hopper will be part of the plan to allow Big Bend Power Station to receive solid fuel deliveries by car unit trains by the end of 2009. A loop track arrangement will be designed to connect to the existing spur

track that comes off of the main CSXT track that is east of US Highway 41. The unloading hopper will discharge coal onto a series of conveyor belts that will extend across Wyandotte Road and the cooling water intake canal. The conveying system will continue along the north boundary of the coal field and will tie in to the west side of the existing outdoor coal storage yard. The new conveying system will be arranged to allow the solid fuel that is received by rail and discharged to either the north or the south storage piles in a manner that is similar to the existing barge unloading system. The loop track will occupy a portion of the available land that is bounded on the west by Wyandotte Road, on the north by Pembroke Road, on the south by the electrical switchyard and on the east by the Tampa Electric property line.

[Click Here to View Certification Statements](#)



OWNER/AUTHORIZED REPRESENTATIVE INFORMATION

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APPLICATION: BIG BEND RAILCAR (#2035-1)
 FACILITY: TAMPA ELECTRIC COMPANY (#0570039)

(+) 10 - SOLID FUEL YARD

[Application Contact](#) | [Professional Engineer](#) | [Responsible Official](#)

Field Name	Applicant's Data		Engineer's Data
** First Name	KAREN	-->	KAREN
** Last Name	SHEFFIELD	-->	SHEFFIELD
Job Title	General Manager - Big Bend Station	-->	General Manager - Big Bend Station
Name of Organization/Firm	TAMPA ELECTRIC COMPANY	-->	TAMPA ELECTRIC COMPANY
** Street Address 1	P.O. BOX 111	-->	P.O. BOX 111
Street Address 2		-->	
** City	TAMPA	-->	TAMPA
** State	FL	-->	FLORIDA (FL)
** Zip Code (5-digit)	33600	-->	33600
Zip Code (4-digit)	0111	-->	0111
Phone	8132284111	-->	8132284111
Fax	8136307121	-->	8136307121
E-Mail	kasheffield@tecoenergy.com	-->	kasheffield@tecoenergy.com

Livingston, Sylvia

From: Livingston, Sylvia
Sent: Tuesday, November 04, 2008 7:44 AM
To: Arif, Syed; Holladay, Cleve
Cc: Walker, Elizabeth (AIR); Gibson, Victoria
Subject: FW: TEC Big Bend Station - Response to Request regarding Mercury & CAIR

Tracking:

Recipient	Read
Arif, Syed	Read: 11/4/2008 7:52 AM
Holladay, Cleve	Read: 11/4/2008 9:01 AM
Walker, Elizabeth (AIR)	
Gibson, Victoria	Read: 11/4/2008 8:54 AM

FYI

Sylvia Livingston
 Bureau of Air Regulation
 Division of Air Resource Management (DARM)
 850/921-0771 (temp)
 GIC 713
sylvia.livingston@dep.state.fl.us

From: Burrows, Byron T. [<mailto:BTBurrows@tecoenergy.com>]
Sent: Monday, November 03, 2008 9:42 PM
To: Livingston, Sylvia; Kahn, Joseph
Cc: Nguyen, Andrew T.; Ward, Julie M.
Subject: TEC Big Bend Station - Response to Request regarding Mercury & CAIR

November, 3 2008

Mr. Joseph Kahn, Director	Via Email:
Division of Air Resource Management	Sylvia.Livingston@dep.state.fl.us
Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, Florida 32399-2400	

RE: Big Bend Power Station**Facility ID No. 0570039****EU ID No. 1 - 4****Subject: Department Letter Dated September 2, 2008****Request for Information Regarding Mercury and CAIR Control Plans**

Dear Mr. Kahn:

11/6/2008

The purpose of this letter is to provide the information requested by the Department regarding the subject request. Tampa Electric Company (TEC) is committed to partnering with the Department in rule development activities. The information provided has been carefully evaluated to ensure accuracy to the extent practical. However, please be advised that some of the information provided is based on future projections of the TEC business plan and regulatory requirements. Therefore, TEC reserves the right to modify its positions as necessary.

Per your request, below are TEC's responses to each question listed in the September 2, 2008 letter:

1. Does your facility have mercury test results?

(a) For example, can you provide the results from fuel sampling fly ash, stack tests, etc.?

Response 1(a):

TEC has results from engineering studies for mercury concentration in coal, fly ash, and stack emissions at Big Bend Station. Table 1 below provides a summary.

TABLE 1-Summary of Big Bend Station Mercury Data

Parameter	Method (Year) [# samples]	Average Result	
Hg in Coal	Grab Sample (2008) [1]	180 ppb	
Hg in Flyash- pre-beneficiation	Grab Samples (2008) [daily]	314 ppb	6.1 lb/month
Hg in Flyash- Beneficiated-low carbon	Grab Samples (2008) [daily]	129 ppb	1.4 lb/month
Hg in Flyash- Beneficiated-high carbon	Grab Samples (2008) [daily]	571 ppb	4.3 lb/month
Hg in Unit 3 FGD Inlet	Ontario-Hydro Method (1999)	0.021 lb/hr	183 lb/yr
Hg in Unit 3 Stack	Ontario-Hydro Method (1999)	0.0071 lb/hr	62 lb/yr
Hg in Units 1 & 2 Common Stack	EPA Method 29/OHM (2006) [7]	0.013 lb/hr	113 lb/yr
Hg in Units 1 & 2 Common Stack	EPA Method 30B (2007) [1]	0.018 lb/hr	131 lb/yr
Hg in Units 3 & 4 Common Stacks	EPA Method 30B (2007) [2 each]	0.0085 lb/hr	74 lb/yr
Notes: 1. Lb/yr values based on operation 8760 hours per year			
2. BBS Units 1-4 equipped with ESP & FGD; Only Unit 4 equipped with SCR during 2007 tests			

(b) Has your facility ever conducted any type of mass balance with regard to mercury within the facility?

Response 1(b):

TEC's Toxic Release Inventory (TRI) reports provide an estimate of the facility wide mass balances of applicable pollutants which includes mercury. The TRI reports are submitted to the Department of Community Affairs and to the U.S. Environmental Protection Agency on an annual basis. In addition, there are on-going initiatives to collect air, byproduct, and water data that will lead to the compilation of a mercury mass balance. Currently, Big Bend Station is half way through its \$330 million SCR project, with SCR's already constructed on Units 3 and 4. Since SCR's are known to enhance the removal efficiency of mercury, the facility mercury balance is expected to continue changing until the final SCR is installed in 2010. We will keep the Department informed as new information becomes available.

(c) In addition, does the facility have test data or information about the speciation of mercury emissions from the facility?

Response 1(c):

TEC has information on the speciation of mercury emissions from Unit 3. However, the test was performed in 1999 when Unit 3 emission controls were limited to an ESP and a FGD system. Recently, an SCR system was added to Unit 3 (resulting in an anticipated change in mercury speciation) and TEC does not have any up-to-date data on speciation of mercury emissions. It is expected that much of the oxidized mercury is removed in the ESP or FGD systems.

2. Can you confirm your estimated mercury emissions?Response 2:

Table 1 in Response 1(a) describes the most accurate estimate of mercury emissions we have at this time. The previously submitted data for required reports such as the Toxics Release Inventory (TRI) and Annual Operating Report (AOR) list the specific emission factors used in each calculation (i.e., WebFire, stack test, AP-42, coal sampling) and the Department already has this information (submitted in the respective reports). The varying estimates are the result of different emission factors used for the various reports and the best removal efficiency data available at the time of the report preparation. TEC has been using the LARK-TRIPP software to calculate the TRI releases. LARK-TRIPP incorporates emission factors from EPRI's "Emission Factors Handbook (2002)", as well as the data on fuel and coal ash composition from EPRI's PISCES Database. The LARK-TRIPP built-in emission factor for mercury compound is 1.75 lb/ 10¹² BTU input for coal-firing. The AOR emission factor for mercury compounds from AP-42 is 8.3 x 10⁻⁵ lb/ton coal burned. The variation between the results of the different calculation methods is not surprising given the extremely small emission rate compared to the very large input rates.

Example:

- Assuming a heating value for coal of 12,000 Btu/lb or 24 MMBtu/ton of coal.
- LARK-TRIPP EF for Hg compounds: 1.75 lb/10¹²Btu
- AP-42 EF for Hg compounds: 8.3 x 10⁻⁵ lb/ton coal burned

Given a coal-fired unit burned 1,000,000 tons of coal in a year, the calculated values of Hg emissions using the LARK-TRIPP vs. the AP-42 Emission Factors are:

LARK-TRIPP Hg emissions: 42 lb/yr

AP-42 Hg emissions: 83 lb/yr

TEC follows the recommended reporting guidelines described by the instructions for the various reports. The variability in the results is an indication of the difficulty in accurately measuring an extremely small concentration, the evolving level of emission data available to us, and the changing emissions profile at Big Bend Station due to our emission reduction initiatives. We will update and refine our reporting procedures as statistically significant new data become available.

3. Do you have mercury related specifications in your fuel contracts?Response 3:

TEC's current coal contracts do not have mercury related specifications or treatment requirements.

4. What is your current coal use and plan for coal in the future?Response 4:

Big Bend Station units are baseload units currently operating on eastern bituminous coal and are sensitive to large variations in fuel type. Accordingly, these units do not burn high percentage of non-coal based fuels (e.g., petroleum coke). However, TEC reserves the right to supplement the coal with the permit allowed percentage of these additional fuel sources given market conditions and may apply to the Department for higher percentages. TEC has the authority to use certain types of coal as specified by the permit, and which may come from different regions. This flexibility is needed to accommodate varying market conditions and to allow for the optimum fuel diversity in the best interest of our customers. Because of this variability in origin and the affordability of mixing, TEC cannot determine future mercury content for its coal sources. The description of eastern bituminous coal analyses outlined in the RMB draft report is representative of TEC's current usage.

5. How does your facility handle treatment of coal combustion products (CCP)?

Response 5:

TEC Big Bend Station proudly recycles essentially all of its coal combustion products: fly ash, scrubber gypsum, and bottom ash. TEC has partnered with Separation Technologies, Inc. to provide flyash beneficiation and continue flyash recycling even after installation of SCR's, which cause ammonia entrainment that would otherwise prevent such recycling. Tampa Electric aggressively minimizes pollution and markets byproducts of its power plant operations. The recycling and reuse of coal combustion byproducts produced at the company's coal-burning power facilities has had a beneficial impact on the environment. Byproducts are used to support industries important to the area's economy. The beneficial use of these products reduces consumption of natural resources, as well as valuable landfill space. Over 98 percent of combustion byproducts generated in 2006-2007 were marketed to customers for beneficial use. At Big Bend, as part of the SO2 removal system, coal combustion exhaust gases are sprayed with a slurry of water and limestone in the scrubbers. The chemical reaction of the slurry with the exhaust gases results in the formation of synthetic gypsum – a material which is ultimately used to manufacture wallboard – in the production of cement and as an agricultural soil supplement. Other coal combustion byproducts are recycled for local and regional use. Flyash is used in cement and concrete for construction, while slag is used in roofing shingles or as grit blasting material. Income streams from Tampa Electric's byproducts aid in controlling electricity prices to customers. As described above, SCR's are known to enhance the removal efficiency of mercury and the facility mercury balance is expected to continue changing until the final SCR is installed in 2010. We will keep the Department informed as new information becomes available.

6. How does your facility handle monitoring of mercury emissions?Response 6:

TEC currently periodically monitors mercury emissions for planning purposes. TEC is currently equipped to conduct monitoring using sorbent trap technology based on EPA Method 30B. TEC is also developing the capability to do portable instrumental monitoring using a trailer equipped with a Thermo Fisher Mercury Freedom system according to EPA Method 30A. TEC plans to continue periodic monitoring as needed to provide information supporting ongoing rulemaking efforts. We believe that periodic monitoring is appropriate at this time given the evolving nature of TEC's environmental initiatives.

7. Does your facility plan to proceed with CAIR controls plans?Response 7:

Yes, TEC committed to install controls that comply with CAIR in 1999 (as part of an agreement with EPA and FDEP) and will continue to install these controls. At this time, Unit 3 and Unit 4 have SCR and FGD systems that surpass CAIR controls requirements. Units 1 & 2 currently have FGD systems and will complete installation of SCR Controls in 2010. There are no vendor guarantees for mercury control but TEC will evaluate the devices mercury control efficiency.

Please feel free to contact me should you have any questions. I can be reached at (813) 228-1282 or by email at btburrows@tecoenergy.com.

Sincerely,

Byron T Burrows, P.E.
Manager - Air Programs
Environmental, Health & Safety

Livingston, Sylvia

From: susiecaplowe@comcast.net
Sent: Thursday, November 06, 2008 11:21 AM
To: Livingston, Sylvia; Walker, Elizabeth (AIR)
Cc: Vielhauer, Trina; Susie Caplowe; Joy Towles Ezell
Subject: Re: BG & E OF TALLAHASSEE, LLC - TALLAHASSEE RENEWABLE ENERGY CENTER;
0730109-001-AC

Hi Trina.

Can you please clarify the legal and public comment deadlines for the BGandE biomass plant.

Legal deadline began when?

Public comment began when?

Thank you. Susie

Sent via BlackBerry by AT&T



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DEC 19 2008

BUREAU OF AIR REGULATION

Via FedEx
Airbill No. 7961 9634 8383

December 18, 2008

Ms. Trina L. Vielhauer
Florida Department of Environmental Protection
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301

**Re: Tampa Electric Company
Air Construction Permit Modification – Railcar Unloading
Proof of Publication of the Intent to Issue
DEP File No. 0570039-041-AC**

Dear Ms. Vielhauer:

Pursuant to Rule 62-110.106(5), F.A.C., enclosed is the proof of publication of the Notice of Intent to Issue the Tampa Electric Company Big Bend Station Air Construction Permit concerning the Big Bend Railcar Unloading Project. This notice was published in the legal section of the Tampa Tribune on December 15, 2008.

Thank you for your attention to this matter. If you have any concerns or questions feel free to contact me or Julie Ward at (813) 228-4740

Sincerely,

Julie Ward
Environmental Engineer - Air Programs
Environmental, Health & Safety

EHS\vkJMW170

Enclosure

c/enc: Ms. Mara Nasca-FDEP SW District

TAMPA ELECTRIC COMPANY
P. O. BOX 111 TAMPA, FL 33601-0111

(813) 228-4111

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POLK COUNTY (863) 299-0800
ALL OTHER COUNTIES 1 (888) 223-0800

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Division of Air Resource Management, Bureau of Air Regulation
Draft Air Permit No. 0570039-041-AC
Tampa Electric Company
Big Bend Station
Hillsborough County, Florida

The Tampa Tribune

Published Daily

Tampa, Hillsborough County, Florida

State of Florida }
County of Hillsborough}

Applicant: The applicant for this project is Tampa Electric Company. The applicant's authorized representative and mailing address is: Mr. Ron Bishop, Director, Big Bend Station, Tampa Electric Company, Post Office Box 111, Tampa, Florida 33601-0111.

Facility Location: Tampa Electric Company operates the Big Bend Station, which is located at 13031 Wyandotte Road, Apollo Beach, Hillsborough County, Florida.

Project: The proposed project is to construct and operate a Railcar Coal Unloading System designed to offset and compliment the existing coal conveying system currently being used for transferring coal from oceangoing barges to the solid fuel yard.

The Railcar Coal Unloading System will consist of one railcar unloading building and a series of conveyors that connect to the existing P1 or F1 conveyors of the solid fuel yard.

The railcar unloading building is an enclosed structure (except for the railcar entrance and exit openings), designed to receive coal as a slow and controlled continuous coal unloading process. The railcar will drop the coal as each railcar unit enters the unloading building and will continue to discharge the coal from its tapered bottom chutes until the railcar reaches the exit end of the building. Once the coal is discharged from the railcar, it will drop through a stationary safety screen called the grizzly and into coal collecting hoppers. Each coal collecting hopper will have tapered discharge chutes equipped with slide gates. From the coal collecting hoppers, the coal will fall directly on a variable speed belt designed to feed coal to the series of conveyors that will transfer the coal to the existing P1 or F1 conveyors of the solid fuel yard. Fugitive emission controls will include building/transfer point enclosure and water/surfactant dust suppression system.

The series of conveyors associated with the Railcar Coal Unloading System will consist of conveyors C-10, C-11, C-12, C-13, C-14, C-15 and C-16. The fugitive emission controls will include hoods on all belt conveyors, all transfer points will be enclosed, and fog type dust suppression system. The coal conveying system is designed for a transport rate of 4,000 tons per hour (TPH) (24-hour rolling average).

The railcar unloading building is an enclosed structure. Fugitive emission controls include building/transfer point enclosure and water/surfactant dust suppression system. The estimated potential emissions increases for particulate matter/particulate matter with a mean diameter equal to or less than 10 microns/ and particulate matter with a mean diameter equal to or less than 2.5 microns (PM/PM10/PM2.5) are 1.439, 0.681 and 0.214 tons per year, respectively, and are well below the Prevention of Significant Deterioration (PSD) significant emissions rates for PM (25 tons/year) and PM10 and PM2.5 (15 tons/year) and therefore not subject to preconstruction review.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site: http://www.dep.state.fl.us/air/eproducts/apds/default.asp.

Before the undersigned authority personally appeared C.Offner, who on oath says that she is the Advertiser Accounting Supervisor of The Tampa Tribune, a daily newspaper published at Tampa in Hillsborough County, Florida; that the attached copy of the

Legal Ads IN THE

The Tampa Tribune

In the matter of Legal ads
was published in said newspaper in the issues of

12/15/2008

Affiant further says that the said The Tampa Tribune is a newspaper published at Tampa in said Hillsborough County, Florida, and that the said newspaper has heretofore been continuously published in said Hillsborough County, Florida, each day and has been entered as second class mail matter at the post office in Tampa, in said Hillsborough County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, this advertisement for publication in the said newspaper

C.Offner

Sworn to and subscribed by me, this 15 day of December, A.D.2008

Personally known or Produced Identification
Type of Identification Produced



Ana Maria Hodel
Commission # DD551367
Expires: MAY 11, 2010
WWW.AARONNOTARY.com

[Signature]

RECEIVED

DEC 19 2008

BUREAU OF AIR REGULATION

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Division of Air Resource Management, Bureau of Air Regulation
Draft Air Permit No. 0570039-041-AC
Tampa Electric Company
Big Bend Station
Hillsborough County, Florida

Applicant: The applicant for this project is Tampa Electric Company. The applicant's authorized representative and mailing address is: Mr. Ron Bishop, Director, Big Bend Station, Tampa Electric Company, Post Office Box 111, Tampa, Florida 33601-0111.

Facility Location: Tampa Electric Company operates the Big Bend Station, which is located at 13031 Wyandotte Road, Apollo Beach, Hillsborough County, Florida.

Project: The proposed project is to construct and operate a Railcar Coal Unloading System designed to offset and compliment the existing coal conveying system currently being used for transferring coal from oceangoing barges to the solid fuel yard.

The Railcar Coal Unloading System will consist of one railcar unloading building and a series of conveyors that connect to the existing P1 or F1 conveyors of the solid fuel yard.

The railcar unloading building is an enclosed structure (except for the railcar entrance and exit openings), designed to receive coal as a slow and controlled continuous coal unloading process. The railcar will drop the coal as each railcar unit enters the unloading building and will continue to discharge the coal from its tapered bottom chutes until the railcar reaches the exit end of the building. Once the coal is discharged from the railcars, it will drop through a stationary safety screen called the grizzly and into coal collecting hoppers. Each coal collecting hopper will have tapered discharge chutes equipped with slide gates. From the coal collecting hoppers, the coal will fall directly on a variable speed belt designed to feed coal to the series of conveyors that will transfer the coal to the existing P1 or F1 conveyors of the solid fuel yard. Fugitive emission controls will include building/transfer point enclosure and water/surfactant dust suppression system.

The series of conveyors associated with the Railcar Coal Unloading System will consist of conveyors C-10, C-11, C-12, C-13, C-14, C-15 and C-16. The fugitive emission controls will include hoods on all belt conveyors, all transfer points will be enclosed, and fog type dust suppression system. The coal conveying system is designed for a transport rate of 4,000 tons per hour (TPH) (24-hour rolling average).

The railcar unloading building is an enclosed structure. Fugitive emission controls include building/transfer point enclosure and water/surfactant dust suppression system. The estimated potential emissions increases for particulate matter/particulate matter with a mean diameter equal to or less than 10 microns/ and particulate matter with a mean diameter equal to or less than 2.5 microns (PM/PM10/PM2.5) are 1.439, 0.681 and 0.214 tons per year, respectively, and are well below the Prevention of Significant Deterioration (PSD) significant emissions rates for PM (25 tons/year) and PM10 and PM2.5 (15 tons/year) and therefore not subject to preconstruction review.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505 Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site: http://www.dep.state.fl.us/air/eproducts/apds/default.asp.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections

The Tampa Tribune
Published Daily

Tampa, Hillsborough County, Florida

State of Florida
County of Hillsborough

Before the undersigned authority personally appeared C.Offner, who on oath says that she is the Advertiser Accounting Supervisor of The Tampa Tribune, a daily newspaper published at Tampa in Hillsborough County, Florida; that the attached copy of the

Legal Ads IN THE

The Tampa Tribune

In the matter of Legal ads

was published in said newspaper in the issues of

12/15/2008

Affiant further says that the said The Tampa Tribune is a newspaper published at Tampa in said Hillsborough County, Florida, and that the said newspaper has heretofore been continuously published in said Hillsborough County, Florida, each day and has been entered as second class mail matter at the post office in Tampa, in said Hillsborough County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, this advertisement for publication in the said newspaper

C.Offner

Sworn to and subscribed by me, this 15 day of December, A.D.2008

Personally known or Produced Identification
Type of Identification Produced



Ana Maria Hodel
Commission #DD551367
Expires: MAY 11, 2010
www.AARONNOTARY.com

Ana Maria Hodel signature

RECEIVED

DEC 19 2008

BUREAU OF AIR REGULATION

BEST AVAILABLE COPY

and Preliminary Determination, the on, and the information submitted by the s, exclusive of confidential records under 403.111, F.S. Interested persons may the Permitting Authority's project review for additional information at the address one number listed above. In addition, copies of these documents are available the following web site: www.dep.state.fl.us/air/eproducts/apds/def

1184763 - TAMPA ELECTRIC COMPANY

Intent to Issue Air Permit: The Permitting gives notice of its intent to issue an air the applicant for the project described. The applicant has provided reasonable a that operation of proposed equipment adversely impact air quality and that the will comply with all appropriate provisions rs 62-4, 62-204, 62-210, 62-212, 62-296 and A.C. The Permitting Authority will issue a mit in accordance with the conditions of used Draft Permit unless a timely petition ministrative hearing is filed under Sections nd 120.57, F.S. or unless public comment n accordance with this notice results in a decision or a significant change of terms or s.

Comments: The Permitting Authority will accept omments concerning the proposed Draft r a period of 14 days from the date of n of the Public Notice. Written comments received by the Permitting Authority by usiness (5:00 p.m.) on or before the end of y period. If written comments received significant change to the Draft Permit, the Authority shall revise the Draft Permit e, if applicable, another Public Notice. All filed will be made available for public

A person whose substantial interests are y the proposed permitting decision may r an administrative hearing in accordance ons 120.569 and 120.57, F.S. The petition ain the information set forth below and led with (received by) the Department's rk In the Office of General Counsel of the it of Environmental Protection at 3900 ealth Boulevard, Mail Station #35, e, Florida 32399-3000. Petitions filed by s other than those entitled to written er Section 120.60(3), F.S. must be filed ays of publication of this Public Notice or a written notice, whichever occurs first. ion 120.60(3), F.S., however, any person l the Permitting Authority for notice of ion may file a petition within 14 days of that notice, regardless of the date of l. A petitioner shall mail a copy of the the applicant at the address indicated the time of filing. The failure of any ile a petition within the appropriate time ll constitute a waiver of that person's equest an administrative determination nder Sections 120.569 and 120.57, F.S., or e in this proceeding and participate as a t. Any subsequent intervention (in a initiated by another party) will be only roval of the presiding officer upon the motion in compliance with Rule 28- i.C.

hat disputes the material facts on which ting Authority's action is based must following information: (a) The name and each agency affected and each agency's ntification number, if known; (b) The ress and telephone number of the the name address and telephone number ioner's representative, if any, which shall ress for service purposes; during the e proceeding; and an explanation of how er's substantial rights will be affected by determination; (c) A statement of when the petitioner received notice of the on or proposed decision; (d) A statement ed issues of material fact. If there are petition must so state; (e) A concise of the ultimate facts alleged, including facts the petitioner contends warrant modification of the agency's proposed A statement of the specific rules or e petitioner contends require reversal or n of the agency's proposed action n explanation of how the alleged facts e specific rules or statutes; and, (g) A of the relief sought by the petitioner, isely the action the petitioner wishes to take with respect to the agency's ction. A petition that does not dispute al facts upon which the Permitting action is based shall state that no such dispute and otherwise shall contain the ation as set forth above, as required by 301, F.A.C.

e administrative hearing process is formulate final agency action, the filing means that the Permitting Authority's may be different from the position taken ; Public Notice of Intent to Issue Air ions whose substantial interests will be any such final decision of the Permitting n the application have the right to become a party to the proceeding, in with the requirements set forth above.

Mediation is not available for this

Memorandum

Florida Department of Environmental Protection

TO: Trina Vielhauer, Bureau of Air Regulation
THROUGH: Syed Arif, New Source Review Section SA
FROM: Cleve Holladay, New Source Review Section
DATE: December 11, 2008
SUBJECT: Draft Air Permit No. 0570039-041-AC
Tampa Electric Company
Big Bend Station
Railcar Unloading Project

This project is subject to minor source preconstruction review. Attached for your review are the following items:

- Written Notice of Intent to Issue Air Permit;
- Public Notice of Intent to Issue Air Permit;
- Technical Evaluation and Preliminary Determination;
- Draft Permit; and
- P.E. Certification.

The Draft Permit authorizes construction of a railcar unloading system designed to offset and complement the existing coal conveying system currently being used for transferring coal from barges to the solid fuel yard. There will be a railcar unloading building that is enclosed (except for the railcar entrance and exit openings). Once the coal is discharged from the railcars, it will drop through a stationary screen and into coal collecting hoppers. From there the coal will be discharged into a network of conveyors that will transfer the coal to existing conveyors P1 or F1 of the solid fuel yard. The proposed work will be conducted at Tampa Electric Company's Big Bend Station, which is located in Hillsborough County, Florida. The Technical Evaluation and Preliminary Determination provides a detailed description of the project and the rationale for issuance. The P.E. certification briefly summarizes the proposed project. I recommend your approval of the attached Draft Permit.

Attachments

P.E. CERTIFICATION STATEMENT

PERMITTEE

Tampa Electric Company
Post Office Box 111
Tampa, Florida 33601-0111

Draft Air Permit No. 0570039-041-AC
Big Bend Power Station
Railcar Coal Unloading Project
Hillsborough County, Florida

PROJECT DESCRIPTION

The proposed project is to construct and operate a Railcar Coal Unloading System designed to offset and compliment the existing coal conveying system currently being used for transferring coal from oceangoing barges to the solid fuel yard.

The Railcar Coal Unloading System will consist of one railcar unloading building and a series of conveyors that connect to the existing P1 or F1 conveyors of the solid fuel yard.

The railcar unloading building is an enclosed structure (except for the railcars entrance and exit openings), designed to receive coal as a slow and controlled continuous coal unloading process. The railcar will drop the coal as each railcar unit enters the unloading building and will continue to discharge the coal from its tapered bottom chutes until the railcar reaches the exit end of the building. Once the coal is discharged from the railcars, it will drop through a stationary safety screen called the grizzly and into coal collecting hoppers. Each coal collecting hopper will have tapered discharge chutes equipped with slide gates. From the coal collecting hoppers, the coal will fall directly on a variable speed belt designed to feed coal to the series of conveyors that will transfer the coal to the existing P1 or F1 conveyors of the solid fuel yard. Fugitive emission controls will include building/transfer point enclosure and water/surfactant dust suppression system.

The series of conveyors associated with the Railcar Coal Unloading System will consist of conveyors C-10, C-11, C-12, C-13, C-14, C-15 and C-16. The fugitive emission controls will include hoods on all belt conveyors, all transfer points will be enclosed, and fog type dust suppression system. The coal conveying system is designed for a transport rate of 4,000 tons per hour (TPH) (24-hour rolling average).

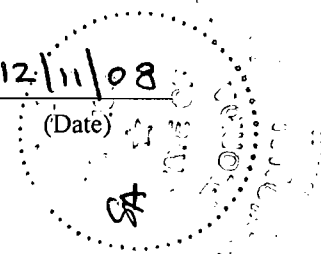
The railcar unloading building is an enclosed structure. Fugitive emission controls include building/transfer point enclosure and water/surfactant dust suppression system. The estimated potential emissions increases for particulate matter/particulate matter with a mean diameter equal to or less than 10 microns/ and particulate matter with a mean diameter equal to or less than 2.5 microns (PM/PM₁₀/PM_{2.5}) of 1.439, 0.681 and 0.214 tons per year, respectively, are well below the Prevention of Significant Deterioration (PSD) significant emissions rates for PM (25 tons/year) and PM₁₀ and PM_{2.5} (15 tons/year) and therefore not subject to preconstruction review.

***I HEREBY CERTIFY** that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, geological, and meteorological features).*



Syed Arif, P.E.
Registration Number: 51861

12/11/08
(Date)





Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

December 12, 2008

Mr. Ron Bishop, Director
Big Bend Power Station
Tampa Electric Company
Post Office Box 111
Tampa, Florida 33601-0111

Re: Air Construction Permit No. 0570039-041-AC
Tampa Electric Company
Big Bend Station
Railcar Unloading Project

Dear Mr. Bishop:

On September 22, 2008, Tampa Electric Company submitted an application requesting authorization to construct a railcar unloading facility which includes an enclosed railcar unloading building and a series of conveyors that connect to the existing P1 or F1 conveyors of the solid fuel yard. This facility is located in Hillsborough County at 13031 Wyandotte Road in Apollo Beach, Florida. Enclosed are the following documents:

- Technical Evaluation and Preliminary Determination;
- Draft Permit and Appendices;
- Written Notice of Intent to Issue Air Permit; and
- Public Notice of Intent to Issue Air Permit.

The Public Notice of Intent to Issue Air Permit is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project. If you have any questions, please contact the Project Engineer, Cleve Holladay, at 850/921-8986.

Sincerely,

Trina Vielhauer, Chief
Bureau of Air Regulation

Enclosures

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

*In the Matter of an
Application for Air Permit by:*

Tampa Electric Company
Big Bend Power Station
Post Office Box 111
Tampa, Florida 33601-0111

Authorized Representative:
Mr. Ron Bishop, Director

Air Permit No. 0570039-041-AC
Facility ID No. 0570039
Big Bend Station
Railcar Unloading Project
Hillsborough County, Florida

Facility Location: Tampa Electric Company operates the Big Bend Station, which is located at 13031 Wyandotte Road, Apollo Beach, Hillsborough County, Florida.

Project: The applicant proposes the following: Construction of a Railcar Unloading System consisting of an enclosed railcar unloading building and a series of conveyors that connect to the existing P1 or F1 conveyors of the solid fuel yard. Fugitive emissions controls will include building/transfer point enclosure and water/surfactant dust suppression system. Details of the project are provided in the application and the enclosed Technical Evaluation and Preliminary Determination.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

Notice of Intent to Issue Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

the Permitting Authority at the above address or phone number. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

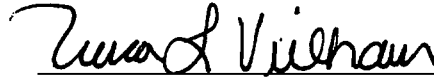
Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.



Trina Vielhauer, Chief
Bureau of Air Regulation

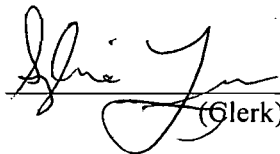
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Air Permit package (including the Public Notice, the Technical Evaluation and Preliminary Determination, and the Draft Permit) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on 12/12/08 to the persons listed below.

- Mr. Ron Bishop, Tampa Electric Company (rbishop@tecoenergy.com)
- Mr. Byron Burrows, Tampa Electric Company (btburrows@tecoenergy.com)
- Ms. Julie Ward, Tampa Electric Company (jmward@tecoenergy.com)
- Mr. Andrew Thuy Nguyen (atnguyen@tecoenergy.com)
- Mr. Jerry Campbell, Hillsborough County (campbell@epchc.org)
- Ms. Diana Lee, Hillsborough County (lee@epchc.org)
- Ms. Mara Nasca, DEP-SWD (mara.nasca@dep.state.fl.us)
- Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)
- Ms. Vickie Gibson, DEP-BAR (victoria.gibson@dep.state.fl.us) (for read file)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.



(Clerk)

12/12/08
(Date)

TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

Tampa Electric Company

Big Bend Station
Railcar Coal Unloading Project

Hillsborough County

Project No. 0570039-041-AC



Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
New Source Review Section

December 12, 2008

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. GENERAL PROJECT INFORMATION

▪ Facility Description and Location

Facility Description. The facility is an electric utility, which is categorized under Standard Industrial Classification Code SIC No. 4911.

Tampa Electric Company's Big Bend Station (TECO-Big Bend) is a nominal 2,028 megawatt (MW) electric generation facility. This facility consists of the following emissions units and operations: four steam boilers (Units Nos. 1 - 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.

At the present time solid fuel is unloaded from ship/barge into the solid fuel yard, the blending bins 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 bins, where the solid fuel may be blended for use at the plant or transloaded into trucks for shipment off site.

This facility is classified as a Major Source of Air Pollution or Title V Source because emissions at least one regulated air pollutant, such as particulate matter (PM), PM with an aerodynamic diameter equal to or less than 10 microns (PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO) or volatile organic compounds (VOC), exceeds 100 tons per year (TPY) pursuant to Rule 62-210.200(Definitions), Florida Administrative Code (F.A.C.). This facility is within an industry included in the list of the 28 Major Facility Categories per Rule 62-210.200(Definitions-Major Source of Air Pollution), F.A.C. The Big Bend facility is in an area that is in attainment (or designated as unclassifiable or maintenance) for all air pollutants subject to a National Ambient Air Quality Standard (NAAQS).

Applicant Name and Address:

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

Authorized Representative: Mr. Ron Bishop

Facility Location. The Big Bend facility is located in Hillsborough County at 13031 Wyandotte Road, Apollo Beach, Florida 33572. The UTM Coordinates are Zone 17, 361.78 km East and 3075.10 km North, and the map coordinates are Latitude 27° 47' 36" and Longitude 82° 24' 11".

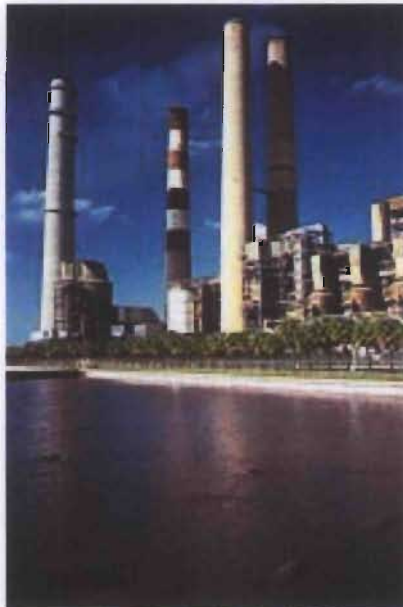
TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION



**LOCATION OF THE FACILITY:
TAMPA, FLORIDA**

**FACILITY ADDRESS:
13031 WYANDOTTE ROAD, APOLLO BEACH**

The following is a picture of the existing Big Bend facility.



**TAMPA ELECTRIC
COMPANY
BIG BEND STATION**

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

▪ **Facility Regulatory Categories**

Title III: The existing facility is a major source of hazardous air pollutants (HAP).

Title IV: The existing facility has units subject to the acid rain provisions of the Clean Air Act.

Title V: The existing facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

Prevention of Significant Deterioration (PSD): The existing facility is a PSD-major source of air pollution in accordance with Rule 62-210.200 (Definitions-Major Source of Air Pollution), F.A.C.

New Source Performance Standards (NSPS): The Railcar Coal Unloading System is subject to 40 Code of Federal Regulations Part 60 (40 CFR 60), Subpart Y (Standards of Performance for Coal Preparation Plants).

▪ **Project Description**

The proposed project is to construct and operate a Railcar Coal Unloading System designed to offset and complement the existing coal conveying system currently being used for transferring coal from oceangoing barges to the solid fuel yard.

The Railcar Coal Unloading System will consist of one railcar unloading building and a series of conveyors that connect to the existing P1 or F1 conveyors of the solid fuel yard (see attached Figures 1, 2a and 2b).

Project Details: The railcar unloading building is an enclosed structure (except for the railcars entrance and exit openings), designed to receive coal as a slow and controlled continuous coal unloading process. The railcar will drop the coal as each railcar unit enters the unloading building and will continue to discharge the coal from its tapered bottom chutes until the railcar reaches the exit end of the building. Once the coal is discharged from the railcars, it will drop through a stationary safety screen called the grizzly and into coal collecting hoppers. Each coal collecting hopper will have tapered discharge chutes equipped with slide gates. From the coal collecting hoppers, the coal will fall directly on a variable speed belt designed to feed coal to the series of conveyors that will transfer the coal to the existing P1 or F1 conveyors of the solid fuel yard. Fugitive emission controls will include building/transfer point enclosure and water/surfactant dust suppression system.

The series of conveyors associated with the Railcar Coal Unloading System will consist of conveyors C-10, C-11, C-12, C-13, C-14, C-15 and C-16. The fugitive emission controls will include hoods on all belt conveyors, all transfer points will be enclosed, and fog type dust suppression system. The coal conveying system is designed to have a transport rate of 4,000 tons per hour (TPH) (24-hour rolling average). The maximum annual transfer for both railcar and barge unloading operations is 8,000,000 tons per year.

Processing Schedule

September 22, 2008	Received permit application
October 21, 2008	Request for Additional Information (RAI) letter issued
October 30, 2008	Received response to RAI letter
November 20, 2008	Received 30-day review clock waiver from Tampa Electric
November 24, 2008	Teleconference with EPCHC and Tampa Electric; Application deemed complete

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

2. APPLICABLE REGULATIONS

▪ State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes. The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code. This project is subject to the applicable rules and regulations defined in the following Chapters of the Florida Administrative Code.

<u>Chapter</u>	<u>Description</u>
62-4	Permitting Requirements
62-204	Ambient Air Quality Requirements and Federal Regulations Adopted by Reference
62-210	Permits Required, Categorical Exemptions, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms
62-212	PSD Review
62-213	Title V Air Operation Permits for Major Sources of Air Pollution
62-297	Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures

▪ Federal Regulations

This project is also subject to the applicable federal provisions regarding air quality as established by the U.S. Environmental Protection Agency (EPA) in the following sections of the Code of Federal Regulations.

<u>40 CFR</u>	<u>Description</u>
Part 60	Subpart A - General Provisions for New Source Performance Standard (NSPS) Sources NSPS Subpart Y – Standards of Performance for Coal Preparation Plants

▪ General PSD Applicability

The Department regulates major air pollution sources in accordance with Florida's PSD program, as approved by the EPA in Florida's State Implementation Plan and defined in Rule 62-212.400, F.A.C. A PSD review is required in areas currently in attainment with the state and federal Ambient Air Quality Standards (AAQS) or areas designated as "unclassifiable" for a given pollutant. Pursuant to Rule 62-210.200(Definitions-Major Source of Air Pollution), F.A.C., a facility is considered "major" with respect to PSD if it emits or has the potential to emit (PTE):

- 250 tons per year or more of any regulated air pollutant;
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the 28 PSD Major Facility Categories; or
- 5 tons per year of lead.

For new projects at PSD-major sources, each regulated pollutant is reviewed for PSD applicability based on emissions thresholds known as the significant emissions rate (SER) and defined in Rule 62-210.200 (Definitions-Significant Emissions Rate), F.A.C. Pollutant emissions from the project exceeding these rates are considered "significant" and the applicant must employ the Best Available Control Technology (BACT) to minimize emissions of each such pollutant and evaluate the air quality impacts. Although a

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

facility may be “major” with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several “significant” regulated pollutants.

For the pollutants of interest in this assessment, significant emissions increase is defined in Rule 62-210.200 (Definitions-Significant Emissions Rate), F.A.C., as follows:

Significant Emissions Rate: With respect to any emissions increase or any net emissions increase, or the potential of a facility to emit any of the following pollutants, significant emissions rate means a rate of pollutant emissions that would equal or exceed:

- a. CO: 100 tons per year (TPY);
- b. NOx: 40 TPY;
- c. SO₂: 40 TPY;
- d. VOC: 40 TPY;
- e. PM:
 - (i) 25 TPY of PM emissions;
 - (ii) 15 TPY of PM₁₀ and PM_{2.5} emissions.

▪ PSD Applicability for the Project

The existing plant emits or has the potential to emit 250 tons per year or more of at least one PSD pollutant. Therefore, the facility is a major stationary source and the project is subject to a PSD applicability review. The applicant provided the following data using emission factors from AP-42, Section 13.2.4 for Aggregate Handling and Storage Piles to summarize the projected emissions increases:

Pollutant	Baseline Actual Emissions (TPY)	Future Projected Emissions (TPY)	Net Change in Emissions (TPY)	PSD Threshold (TPY)	PSD Applies ?
PM	1.069	2.506	1.439	25	No
PM ₁₀	0.506	1.186	0.681	15	No
PM _{2.5}	0.159	0.373	0.214	15	No

In addition, the existing particulate matter facility-wide emissions cap of 2,767 TPY will not be exceeded as a result of this project [0570039-012-AC and 0570039-017-AV].

In summary, no pollutant exceeds the PSD significant emission rate. Therefore, a PSD preconstruction new source review and BACT Determination are not required and the project is considered to be a minor modification to a major facility.

3. PERMIT CONDITIONS

Brief Discussion of Emissions

This permit applies to the following emissions points described below:

ARMS ID	Emission Point Description
010	Railcar Coal Unloading Building
010	Railcar Coal Unloading Conveying System

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

The existing solid fuel yard emission unit has 76 emissions points. [Source: Technical Evaluation and Preliminary Determination, Tampa Electric Company, Off-site Transloading of Coal, Petcoke and Slag Project, 0570039-025-AC]

A total of ten more will be added with this project. There will be train car unloading to the track hopper, a drop to the belt feeder, a transfer to C-1, and then to conveyors 10-16. These conveyors will then connect with the existing conveyor network. Fugitive emission controls will include building/transfer point enclosure and water/surfactant dust suppression system.

The applicant used emission factors from AP-42, Section 13.2.4 for Aggregate Handling and Storage Piles to calculate projected future maximum emissions for PM, PM₁₀ and PM_{2.5} to be 2.508, 1.186 and 0.373 tons per year, respectively.

However, the Environmental Protection Commission of Hillsborough County (EPCHC) requested that TECO calculate particulate matter emission rates from AP-42, Section 11-9, Western Surface Coal Mining, Table 11-9-1 or from Table 1, Fugitive Dust Emission Factors for Coal-Processing Plants, in the Air & Waste Management Association Air Pollution Engineering Manual, Second Edition, Chapter 15. The Department maintains that emission factors that were from AP-42, Section 13.2.4, Aggregate Handling and Storage Piles are applicable. The United States Environmental Protection Agency Region IV concurs with the Department. However, the Department and the EPCHC agreed that if the visible emissions test results for the vent on the railcar unloading building exceed 5% opacity then TECO shall perform a particulate matter stack test to determine whether further PM controls are needed, i.e., a baghouse on the railcar unloading building.

4. AIR QUALITY ANALYSIS

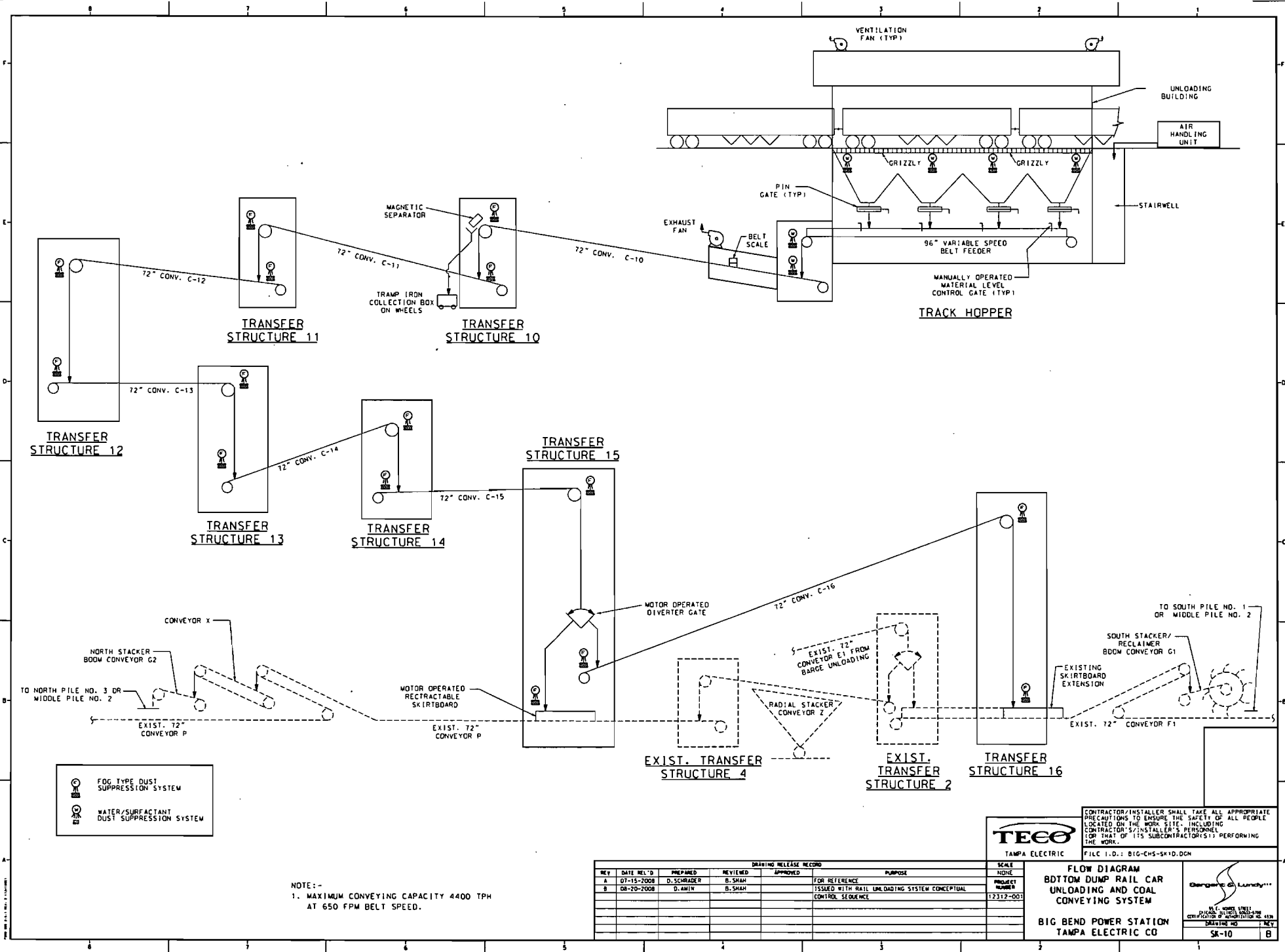
Air Quality Analysis

The proposed project is not subject to preconstruction review requirements; therefore, an air quality analysis is not required.

5. CONCLUSION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Cleve Holladay is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

Attachment



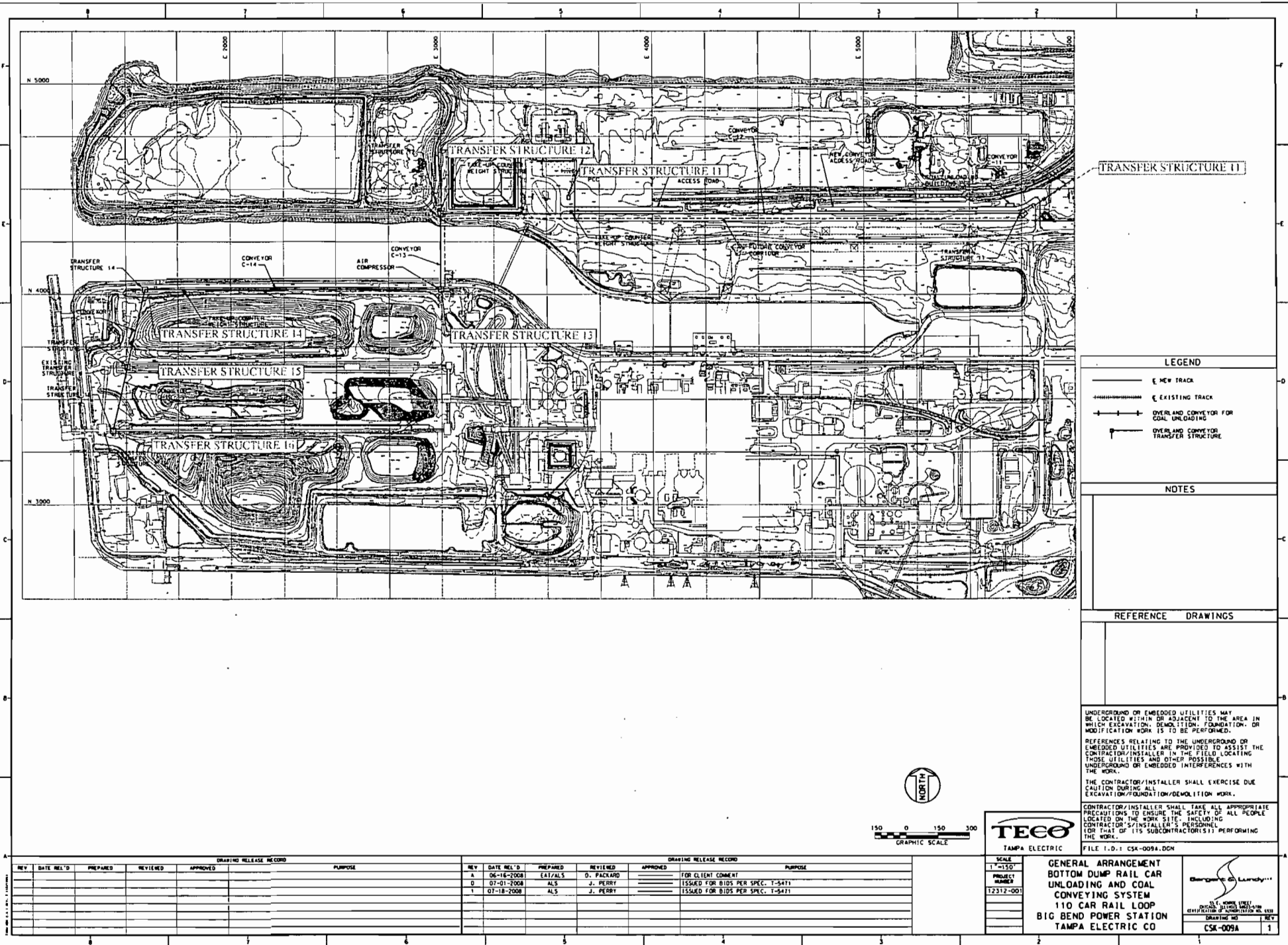
NOTE:-
 1. MAXIMUM CONVEYING CAPACITY 4400 TPH
 AT 650 FPM BELT SPEED.

FOG TYPE DUST SUPPRESSION SYSTEM
 WATER/SURFACTANT DUST SUPPRESSION SYSTEM

DRAWING RELEASE RECORD					SCALE
REV	DATE	PREPARED	REVIEWED	APPROVED	PURPOSE
A	07-15-2008	D. SCHLAEGER	B. SHAH		FOR REFERENCE
B	08-20-2008	D. AMIN	B. SHAH		ISSUED WITH RAIL UNLOADING SYSTEM CONCEPTUAL CONTROL SEQUENCE

TAMPA ELECTRIC
 FILE I.D.: BIG-CHS-SK10.DWG
 CONTRACTOR/INSTALLER SHALL TAKE ALL APPROPRIATE PRECAUTIONS TO ENSURE THE SAFETY OF ALL PEOPLE LOCATED ON THE WORK SITE, INCLUDING CONTRACTOR'S/INSTALLER'S PERSONNEL (OR THAT OF ITS SUBCONTRACTOR(S)) PERFORMING THE WORK.
George G. Lundy
 PROJECT NUMBER: 12312-003
 BIG BEND POWER STATION
 TAMPA ELECTRIC CO
 SK-10 B

Figure 1



TRANSFER STRUCTURE 11

- LEGEND**
- E NEW TRACK
 - - - - - EXISTING TRACK
 - +— OVERLAND CONVEYOR FOR COAL UNLOADING
 - +— OVERLAND CONVEYOR FOR TRANSFER STRUCTURE

NOTES

REFERENCE DRAWINGS

UNDERGROUND OR EMBEDDED UTILITIES MAY BE LOCATED WITHIN OR ADJACENT TO THE AREA IN WHICH EXCAVATION, DEMOLITION, FOUNDATION, OR MODIFICATION WORK IS TO BE PERFORMED. REFERENCES RELATING TO THE UNDERGROUND OR EMBEDDED UTILITIES ARE PROVIDED TO ASSIST THE CONTRACTOR/INSTALLER IN THE FIELD LOCATING THOSE UTILITIES AND OTHER POSSIBLE UNDERGROUND OR EMBEDDED INTERFERENCES WITH THE WORK.

THE CONTRACTOR/INSTALLER SHALL EXERCISE DUE CAUTION DURING ALL EXCAVATION/FOUNDATION/DEMOLITION WORK.

CONTRACTOR/INSTALLER SHALL TAKE ALL APPROPRIATE PRECAUTIONS TO ENSURE THE SAFETY OF ALL PEOPLE LOCATED ON THE WORK SITE, INCLUDING CONTRACTOR'S/INSTALLER'S PERSONNEL FOR THAT OF ITS SUBCONTRACTOR(S) PERFORMING THE WORK.



TECO
TAMPA ELECTRIC

FILE 1.D.1 CSK-0094.DWG

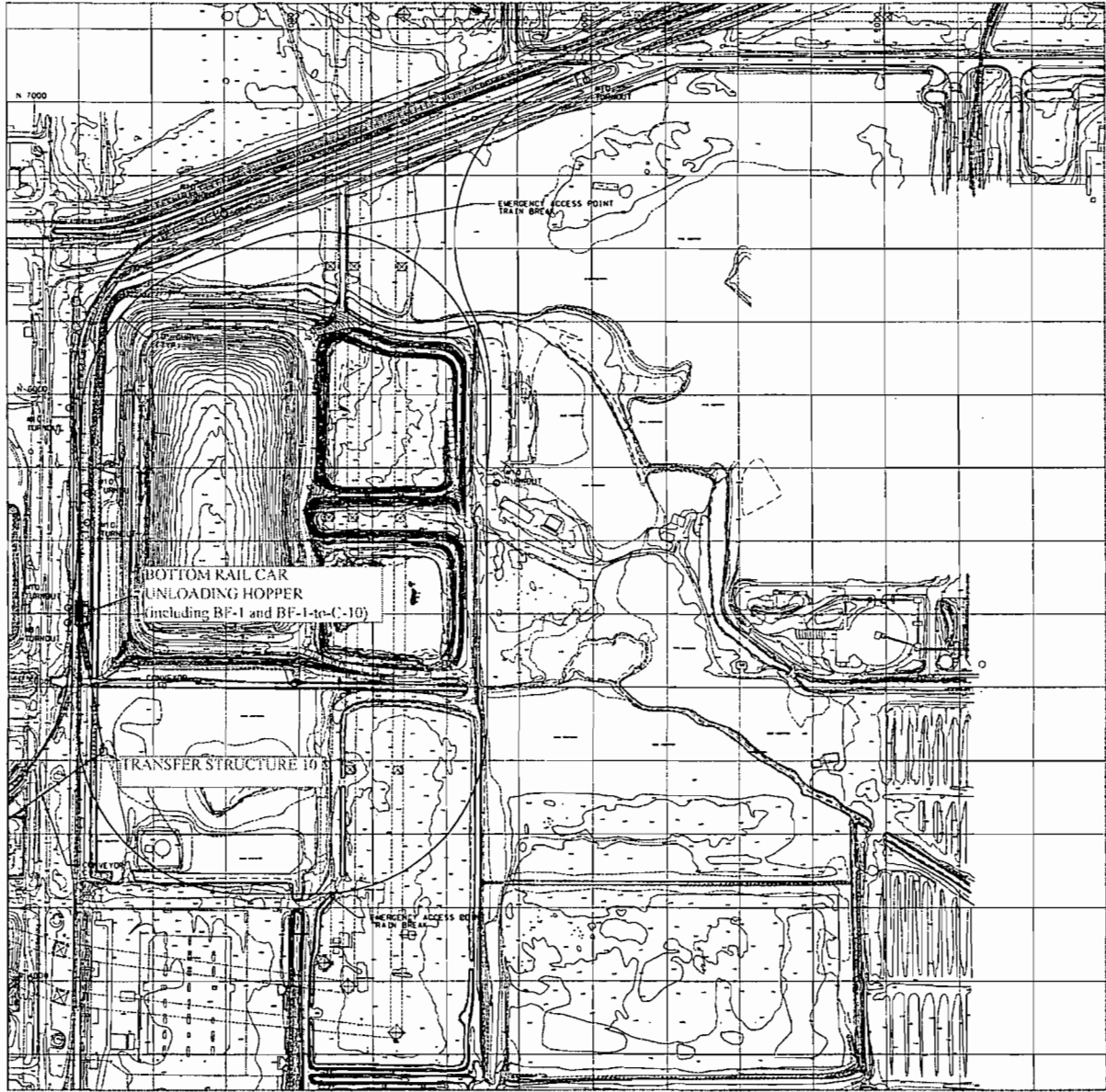
DRAWING RELEASE RECORD					PURPOSE
REV	DATE	REL'D	PREPARED	REVIEWED	APPROVED

DRAWING RELEASE RECORD					PURPOSE
REV	DATE	REL'D	PREPARED	REVIEWED	APPROVED
A	06-16-2008		EAT/ALS	D. PACIARD	FOR CLIENT COMMENT
D	07-01-2008		ALS	J. PERRY	ISSUED FOR BIDS PER SPEC. T-5471
1	07-18-2008		ALS	J. PERRY	ISSUED FOR BIDS PER SPEC. T-5471

SCALE	1"=150'
PROJECT NUMBER	12312-001
DRAWING NO.	CSK-0094
REV	1

**GENERAL ARRANGEMENT
BOTTOM DUMP RAIL CAR
UNLOADING AND COAL
CONVEYING SYSTEM
110 CAR RAIL LOOP
BIG BEND POWER STATION
TAMPA ELECTRIC CO**

Figure 2a



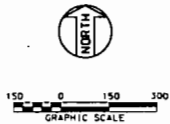
LEGEND	
	NEW TRACK
	EXISTING TRACK
	OVERLAND CONVEYOR FOR COAL UNLOADING
	OVERLAND CONVEYOR TRANSFER STRUCTURE

NOTES

REFERENCE DRAWINGS

UNDERGROUND OR EMBEDDED UTILITIES MAY BE LOCATED WITHIN OR ADJACENT TO THE AREA IN WHICH EXCAVATION, DEMOLITION, FOUNDATION, OR MODIFICATION WORK IS TO BE PERFORMED. REFERENCES RELATING TO THE UNDERGROUND OR EMBEDDED UTILITIES ARE PROVIDED TO ASSIST THE CONTRACTOR/INSTALLER IN THE FIELD LOCATING THOSE UTILITIES AND OTHER POSSIBLE UNDERGROUND OR EMBEDDED INTERFERENCES WITH THE WORK. THE CONTRACTOR/INSTALLER SHALL EXERCISE DUE CAUTION DURING ALL EXCAVATION/FOUNDATION/DEMOLITION WORK. CONTRACTOR/INSTALLER SHALL TAKE ALL APPROPRIATE PRECAUTIONS TO ENSURE THE SAFETY OF ALL PEOPLE LOCATED ON THE WORK SITE, INCLUDING CONTRACTOR'S/INSTALLER'S PERSONNEL (OR THAT OF ITS SUBCONTRACTOR(S)) PERFORMING THE WORK.

FILE I.D.: CSK-009B.DGN



TECO
TAMPA ELECTRIC

SCALE: 1"=150'
PROJECT NUMBER: 12312-001
BIG BEND POWER STATION
TAMPA ELECTRIC CO

GENERAL ARRANGEMENT
BOTTOM DUMP RAIL CAR
UNLOADING AND COAL
CONVEYING SYSTEM

George C. Lynch
P.L. ENGINEER
REGISTERED PROFESSIONAL ENGINEER
DRAWING NO. CSK-009B 1 REV

DRAWING RELEASE RECORD						DRAWING RELEASE RECORD						
REV	DATE	REL'D	PREPARED	REVIEWED	APPROVED	REV	DATE	REL'D	PREPARED	REVIEWED	APPROVED	PURPOSE
						A	06-02-2008		A. SLACH	D. PACIARD		FOR CLIENT COMMENT
						D	07-01-2008		ALS	J. PERRY		ISSUED FOR BIDS PER SPEC. 1-5471
						I	07-18-2008		ALS	J. PERRY		ISSUED FOR BIDS PER SPEC. 1-5471

Figure 2b

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Division of Air Resource Management, Bureau of Air Regulation
Draft Air Permit No. 0570039-041-AC
Tampa Electric Company
Big Bend Station
Hillsborough County, Florida

Applicant: The applicant for this project is Tampa Electric Company. The applicant's authorized representative and mailing address is: Mr. Ron Bishop, Director, Big Bend Station, Tampa Electric Company, Post Office Box 111, Tampa, Florida 33601-0111.

Facility Location: Tampa Electric Company operates the Big Bend Station, which is located at 13031 Wyandotte Road, Apollo Beach, Hillsborough County, Florida.

Project: The proposed project is to construct and operate a Railcar Coal Unloading System designed to offset and compliment the existing coal conveying system currently being used for transferring coal from oceangoing barges to the solid fuel yard.

The Railcar Coal Unloading System will consist of one railcar unloading building and a series of conveyors that connect to the existing P1 or F1 conveyors of the solid fuel yard.

The railcar unloading building is an enclosed structure (except for the railcar entrance and exit openings), designed to receive coal as a slow and controlled continuous coal unloading process. The railcar will drop the coal as each railcar unit enters the unloading building and will continue to discharge the coal from its tapered bottom chutes until the railcar reaches the exit end of the building. Once the coal is discharged from the railcars, it will drop through a stationary safety screen called the grizzly and into coal collecting hoppers. Each coal collecting hopper will have tapered discharge chutes equipped with slide gates. From the coal collecting hoppers, the coal will fall directly on a variable speed belt designed to feed coal to the series of conveyors that will transfer the coal to the existing P1 or F1 conveyors of the solid fuel yard. Fugitive emission controls will include building/transfer point enclosure and water/surfactant dust suppression system.

The series of conveyors associated with the Railcar Coal Unloading System will consist of conveyors C-10, C-11, C-12, C-13, C-14, C-15 and C-16. The fugitive emission controls will include hoods on all belt conveyors, all transfer points will be enclosed, and fog type dust suppression system. The coal conveying system is designed for a transport rate of 4,000 tons per hour (TPH) (24-hour rolling average).

The railcar unloading building is an enclosed structure. Fugitive emission controls include building/transfer point enclosure and water/surfactant dust suppression system. The estimated potential emissions increases for particulate matter/particulate matter with a mean diameter equal to or less than 10 microns/ and particulate matter with a mean diameter equal to or less than 2.5 microns (PM/PM₁₀/PM_{2.5}) are 1.439, 0.681 and 0.214 tons per year, respectively, and are well below the Prevention of Significant Deterioration (PSD) significant emissions rates for PM (25 tons/year) and PM₁₀ and PM_{2.5} (15 tons/year) and therefore not subject to preconstruction review.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the

(Public Notice to be Published in the Newspaper)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site:

<http://www.dep.state.fl.us/air/eproducts/apds/default.asp>.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address and telephone number of the petitioner; the name address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial rights will be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

(Public Notice to be Published in the Newspaper)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available for this proceeding.

DRAFT PERMIT

PERMITTEE:

Tampa Electric Company
Big Bend Power Station
Post Office Box 111
Tampa, Florida 33601-0111
Authorized Representative:
Mr. Ron Bishop, Director

Project No. 0570039-041-AC
Big Bend Station
Railcar Coal Unloading Project
SIC No. 4911
Permit Expires December 31, 2010

PROJECT AND LOCATION

This permit authorizes the construction and operation of a Railcar Coal Unloading System designed to offset and/or compliment the existing coal conveying system currently being used for transferring coal from oceangoing barges to the solid fuel yard. The existing facility is located at 13031 Wyandotte Road in Apollo Beach, Hillsborough County. The map coordinates are UTM Zone 17, 361.78 km East and 3075.10 km North.

STATEMENT OF BASIS

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The project was processed in accordance with the requirements of Rule 62-212.400, F.A.C., the preconstruction review program for the Prevention of Significant Deterioration (PSD) of Air Quality. The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

CONTENTS

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Units Specific Conditions
- Section 4. Appendices

Joseph Kahn, Director
Division of Air Resource Management

Effective Date

SECTION 1. GENERAL INFORMATION (DRAFT PERMIT)

FACILITY DESCRIPTION

The Tampa Electric Company's Big Bend Station (Big Bend) is a nominal 2,028 megawatt (MW) existing electric utility plant located in Apollo Beach, Florida. The facility produces electricity for distribution to the grid as a saleable product.

The regulated emissions units at Big Bend include the following: four steam boilers (Units Nos. 1 - 4); four steam turbines; three simple-cycle combustion turbines (SCCT Nos. 1 - 3); solid fuels, fly ash, limestone, gypsum, slag, and bottom ash storage and handling facilities, and fuel oil storage tanks. Units Nos. 1, 2, 3 and 4 have nominal maximum heat inputs of 4037, 3996, 4115 and 4330 million British thermal units (MMBTU) per hour, respectively. Units Nos. 1 - 4 are fired with coal and petroleum coke (petcoke) mixture with up to 20.0% petcoke/80.0% coal (by weight), or a coal blended with coal residual generated from the Polk Power Station, or a coal/petcoke blend further blended with coal residual generated from the Polk Power Station. The simple-cycle combustion turbines (SCCT) are fired with No. 2 distillate fuel oil. In addition, there is a ship surface coating operation. The facility has emissions units that are Acid Rain Units and regulated under the Florida Electrical Power Plant Siting Act.

PROJECT DESCRIPTION

The proposed project is to construct and operate a Railcar Coal Unloading System designed to offset and/or complement the existing coal conveying system currently being used for transferring coal from oceangoing barges to the solid fuel yard (Emission Unit ID No. 010).

The Railcar Coal Unloading System will consist of one railcar unloading building and a series of conveyors that connect to the existing P1 or F1 conveyors of the solid fuel yard.

The railcar unloading building is an enclosed structure (except for the railcar entrance and exit openings), designed to receive coal as a slow and controlled continuous coal unloading process. The railcar will drop the coal as each railcar unit enters the unloading building and will continue to discharge the coal from its tapered bottom chutes until the railcar reaches the exit end of the building. Once the coal is discharged from the railcars, it will drop through a stationary safety screen and into coal collecting hoppers. Each coal collecting hopper will have tapered discharge chutes equipped with slide gates. From the coal collecting hoppers, the coal will fall directly on a variable speed belt designed to feed coal to the series of conveyors that will transfer the coal to the existing P1 or F1 conveyors of the solid fuel yard. Fugitive emission controls will include building/transfer point enclosure and water/surfactant dust suppression system.

REGULATORY CLASSIFICATION

Title III: The facility is a major source of hazardous air pollutants (HAP).

Title IV: The facility has units subject to the Acid Rain provisions of the Clean Air Act. The new SCCT will be subject to the Acid Rain provisions of the Clean Air Act.

Title V: The facility is a Title V or "Major Source of Air Pollution" in accordance with Rule 62-210.200 (Definitions) and Chapter 62-213, F.A.C.

PSD: The facility is a PSD-major facility pursuant to Chapter 62-212, F.A.C.

New Source Performance Standards (NSPS): The Railcar Coal Unloading System is subject to 40 Code of Federal Regulations CFR 60, Subpart Y (Standards of Performance for Coal Preparation Plants).

APPENDICES

The following Appendices are attached as part of this permit.

- | | |
|-------------|-----------------------------------------------|
| Appendix A. | Citation Formats and Glossary of Common Terms |
| Appendix B. | General Conditions |

SECTION I. GENERAL INFORMATION (DRAFT PERMIT)

Appendix C.	Common Conditions
Appendix D.	Common Testing Requirements
Appendix E.	NSPS Subpart A, General Provisions
Appendix F.	NSPS Subpart Y, Requirements for Coal Preparation Plants

RELEVANT DOCUMENTS

The following relevant documents are not a part of this permit, but helped form the basis for this permitting action: the permit application and additional information received to make it complete; the draft permit package including the Department's Technical Evaluation and Preliminary Determination; publication and comments; and the Department's Final Determination.

SECTION II. ADMINISTRATIVE REQUIREMENTS (DRAFT PERMIT)

1. Permitting Authority: All documents related to applications for permits to construct, operate or modify emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (DEP), at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. Copies of all such documents shall also be submitted to the Compliance Authority.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Hillsborough County Environmental Protection Commission (HCEPC) office. The mailing address of the HCEPC's Air Quality Division (AQD) is 3629 Queen Palm Drive, Tampa, Florida 33619. The AQD's telephone number is 813/627-2600 and facsimile number is 813/627-2660.
3. General Conditions: The permittee shall operate under the attached General Conditions listed in Appendix B of this permit. General Conditions are binding and enforceable pursuant to Chapter 403, F.S. [Rule 62-4.160, F.A.C.]
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C., and follow the application procedures in Chapter 62-4, F.A.C. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
5. Construction and Expiration: The permit expiration date includes sufficient time to complete construction, perform required testing, submit test reports, and submit an application for a Title V operation permit to the Department. Approval to construct shall become invalid if construction is not completed within a reasonable time. The Department may extend the expiration date upon a satisfactory showing that an extension is justified. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080, 62-210.300(1), and 62-212.400(12), F.A.C.]
6. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
7. Source Obligation:
 - a. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
 - b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

SECTION II. ADMINISTRATIVE REQUIREMENTS (DRAFT PERMIT)

8. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. This permit authorizes construction of the referenced facilities. [Chapters 62-210 and 62-212, F.A.C.]
9. Title V Air Operation Permit: This permit authorizes construction of the permitted emissions unit and initial operation to determine compliance with Department rules. A Title V Air Operation Permit is required for regular operation of the permitted emission units. The permittee shall apply for and obtain a Title V operation permit in accordance with Rule 62-213.420, F.A.C. To apply for a Title V Air Operation Permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's Bureau of Air Regulation and a copy to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS (DRAFT PERMIT)

A. RAILCAR COAL UNLOADING SYSTEM

The specific conditions of this subsection apply to the following emissions points after construction is complete.

ARMS ID	Emission Point Description
010	Railcar Coal Unloading Building
010	Railcar Coal Unloading Conveying System

The series of conveyors associated with the Railcar Coal Unloading System will consist of conveyors C-10, C-11, C-12, C-13, C-14, C-15 and C-16. The fugitive emission controls will include hoods on all belt conveyors, all transfer points will be enclosed, and fog type dust suppression system. The coal conveying system is designed for a transport rate of 4,000 tons per hour (TPH) (24-hour rolling average).

APPLICABLE STANDARDS AND REGULATIONS

1. NSPS Requirements: The Railcar Coal Unloading Building shall comply with the applicable NSPS in 40 CFR 60 including: Subpart A (General Provisions) and Subpart Y (Standards of Performance for Standards of Performance for Coal Preparation Plants). See Appendix E for the NSPS Subpart A provisions and Appendix F for the NSPS Subpart Y provisions. Some separate reporting and monitoring may be required by the individual subparts. [Rule 62-204.800(7)(b), F.A.C., and 40 CFR 60, Subparts A and Y]

EQUIPMENT DESCRIPTION

2. Railcar Coal Unloading System: The permittee is authorized to install and operate a Railcar Coal Unloading System designed to offset and compliment the existing coal conveying system currently being used for transferring coal from oceangoing barges to the solid fuel yard (Emission Unit ID No. 010).

[Application 0570039-041-AC; and Rules 62-210.200(Definitions-Potential to Emit (PTE)) and 62-4.070(3), F.A.C.]

PERFORMANCE REQUIREMENTS

3. Permitted Capacity: The maximum unloading rate is 4000 tons per hour (24-hour average). The maximum annual transfer for both railcar and barge unloading operations is 8,000,000 tons per year. [Rule 62-210.200(PTE), F.A.C.]
4. Restricted Operation: The hours of operation are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200 (PTE), F.A.C.]

EMISSIONS STANDARDS

5. Fugitive Dust Emissions: During the construction period, fugitive dust emissions shall be minimized by techniques such as covering, confining and/or the application of water or dust suppressants to the affected areas, or removal of particulate matter from roads and other paved areas to prevent re-entrainment, as necessary. [Rule 62-296.320(4)(c), F.A.C.]
6. Railcar Coal Unloading Building: The permittee shall install a water/surfactant dust suppression system to control particulate matter emissions from the railcar coal unloading hopper. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C. and Application No. 0570039-041-AC]
7. Railcar Coal Unloading Conveying System: The permittee shall install a water/surfactant dust suppression system to control particulate matter emissions from the railcar coal unloading hopper. [Rules 62-4.070, F.A.C.]
8. Opacity: As determined by EPA Method 9, visible emissions from the railcar coal unloading system shall

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS (DRAFT PERMIT)

A. RAILCAR COAL UNLOADING SYSTEM

not exceed 20% opacity.

[40 CFR 60, Subpart Y (Standards of Performance for Coal Preparation Plants)]

9. **PM Control Requirement.** If the initial performance visible emissions test results in greater than 5% opacity, the permittee shall perform a stack test for particulate matter (PM) to evaluate if further PM controls are needed. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

Permitting Note: In addition, the requirements in 40 CFR 60, New Source Performance Standard (NSPS) Subpart Y for Coal Preparation Plants, have been proposed to be amended on April 28, 2008 and would be applicable to all sources addressed in this standard and constructed after that date. These amended standards, including installing a baghouse on the railcar unloading building may become applicable to this project when these standards become final and are adopted in the Florida rules.

TESTING REQUIREMENTS

10. **Initial Compliance Tests:** The Railcar Coal Unloading Building vents shall be tested to demonstrate initial compliance with the emissions standard for visible emissions. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit. [Rules 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]
11. **Annual Compliance Tests:** During each federal fiscal year (October 1st to September 30th), the Railcar Coal Unloading Building vents shall be tested to demonstrate compliance with the emissions standard for visible emissions. [Rule 62-297.310(7)(a)4, F.A.C.]
12. **Test Requirements:** The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]
13. **Unconfined Particulate Emissions:** During the construction period, unconfined PM emissions shall be minimized by dust suppressing techniques such as covering, confining, or applying water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]
14. **Standard Testing Requirements:** See Appendix D (Common Testing Requirements) of this permit for notification, testing, recordkeeping and reporting requirements regarding a performance test. [Rules 62-204.800 and 62-297.100, F.A.C.; Appendix D of this permit; and 40 CFR 60, Appendix A]
15. **Test Methods:** Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1-4	Methods for Determining Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content: These methods shall be performed as necessary to support other methods. (IF REQUIRED)
5	Method for Determining Particulate Matter Emissions (IF REQUIRED)
9	Visible Emissions Test

The methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used for compliance testing unless prior written approval is received from the Administrator of the Department's Emissions Monitoring Section in accordance with an alternate sampling procedure pursuant to Rule 62-297.620, F.A.C. [Rule 62-204.800, F.A.C. and 40 CFR 60, Appendix A]

16. **Testing Requirements:** Initial and subsequent performance tests shall be conducted between 90% and 100% of permitted capacity in accordance with the requirements of Rule 62-297.310(2), F.A.C.

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS (DRAFT PERMIT)

A. RAILCAR COAL UNLOADING SYSTEM

[Rules 62-297.310(2) and (7)(a), F.A.C.; 40 CFR 60.8; and Appendix D of this permit]

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

REPORTING AND RECORDKEEPING REQUIREMENTS

18. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(8), F.A.C. and Appendix D of this permit]

SECTION 4. APPENDICES

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SECTION 4. APPENDIX A
CITATION FORMATS AND GLOSSARY OF COMMON TERMS

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: "AC" identifies the permit as an Air Construction Permit
"AO" identifies the permit as an Air Operation Permit
"123456" identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: "099" represents the specific county ID number in which the project is located
"2222" represents the specific facility ID number for that county
"001" identifies the specific permit project number
"AC" identifies the permit as an air construction permit
"AF" identifies the permit as a minor source federally enforceable state operation permit
"AO" identifies the permit as a minor source air operation permit
"AV" identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: "PSD" means issued pursuant to the preconstruction review requirements of the Prevention of Significant Deterioration of Air Quality
"FL" means that the permit was issued by the State of Florida
"317" identifies the specific permit project number

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CFR 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

acfm: actual cubic feet per minute

ARMS: Air Resource Management System (Department's database)

BACT: best available control technology

Btu: British thermal units

CAM: compliance assurance monitoring

SECTION 4. APPENDIX A
CITATION FORMATS AND GLOSSARY OF COMMON TERMS

CEMS: continuous emissions monitoring system
cfm: cubic feet per minute
CFR: Code of Federal Regulations
CO: carbon monoxide
COMS: continuous opacity monitoring system
DEP: Department of Environmental Protection
Department: Department of Environmental Protection
dscfm: dry standard cubic feet per minute
EPA: Environmental Protection Agency
ESP: electrostatic precipitator (control system for reducing particulate matter)
EU: emissions unit
F.A.C.: Florida Administrative Code
F.D.: forced draft
F.S.: Florida Statutes
FGR: flue gas recirculation
Fl: fluoride
ft²: square feet
ft³: cubic feet
gpm: gallons per minute
gr: grains
HAP: hazardous air pollutant
Hg: mercury
I.D.: induced draft
ID: identification
kPa: kilopascals
lb: pound
MACT: maximum achievable technology
MMBtu: million British thermal units
MSDS: material safety data sheets
MW: megawatt
NESHAP: National Emissions Standards for Hazardous Air Pollutants
NO_x: nitrogen oxides
NSPS: New Source Performance Standards
O&M: operation and maintenance
O₂: oxygen

SECTION 4. APPENDIX A
CITATION FORMATS AND GLOSSARY OF COMMON TERMS

Pb: lead

PM: particulate matter

PM₁₀: particulate matter with a mean aerodynamic diameter of 10 microns or less

PSD: prevention of significant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)

SO₂: sulfur dioxide

TPH: tons per hour

TPY: tons per year

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

SECTION 4. APPENDIX B
GENERAL CONDITIONS

The permittee shall comply with the following general conditions from Rule 624.160, F.A.C.

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

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S.. Such evidence

SECTION 4. APPENDIX B
GENERAL CONDITIONS

shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.
11. This permit is transferable only upon Department approval in accordance with Rules 624.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - a. Compliance with New Source Performance Standards
14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - 1) The date, exact place, and time of sampling or measurements;
 - 2) The person responsible for performing the sampling or measurements;
 - 3) The dates analyses were performed;
 - 4) The person responsible for performing the analyses;
 - 5) The analytical techniques or methods used; and
 - 6) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION 4. APPENDIX C
COMMON CONDITIONS

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

1. **Plant Operation - Problems:** If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
2. **Circumvention:** The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
3. **Excess Emissions Allowed:** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
4. **Excess Emissions Prohibited:** Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
5. **Excess Emissions - Notification:** In case of excess emissions resulting from malfunctions, the permittee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
6. **VOC or OS Emissions:** No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
7. **Objectionable Odor Prohibited:** No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.]
8. **General Visible Emissions:** No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]
9. **Unconfined Particulate Emissions:** During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

{Permitting Note: Rule 62-210.700 (Excess Emissions), F.A.C., cannot vary any NSPS or NESHAP provision.}

RECORDS AND REPORTS

10. **Records Retention:** All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]
11. **Annual Operating Report:** The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority as required by Rule 62-210.370(3)(c), F.A.C. [Rule 62-210.370(3), F.A.C.]

**SECTION 4. APPENDIX D
COMMON TESTING REQUIREMENTS**

Unless otherwise specified in the permit, the following testing requirements apply to all emissions units at the facility.

COMPLIANCE TESTING REQUIREMENTS

1. 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 two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]
2. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate 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. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]
3. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
4. Applicable Test Procedures
 - a. *Required Sampling Time*.
 - (1) Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - (2) Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - (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 or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - c. *Calibration of Sampling Equipment*. Calibration of the sampling train equipment shall be conducted in accordance

**SECTION 4. APPENDIX D
COMMON TESTING REQUIREMENTS**

with the schedule shown in Table 297.310-1, F.A.C.

- d. *Allowed Modification to EPA Method 5.* When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

[Rule 62-297.310(4), F.A.C.]

5. 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.]

6. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must also comply with all applicable Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

- a. *Permanent Test Facilities.* The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.
- b. *Temporary Test Facilities.* The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.
- c. *Sampling Ports.*
- (1) All sampling ports shall have a minimum inside diameter of 3 inches.
 - (2) The ports shall be capable of being sealed when not in use.
 - (3) The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
 - (4) For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
 - (5) On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.
- d. *Work Platforms.*
- (1) Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.

**SECTION 4. APPENDIX D
COMMON TESTING REQUIREMENTS**

- (2) On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
 - (3) On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
 - (4) All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toe board, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.
- e. *Access to Work Platform.*
- (1) Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.
 - (2) Walkways over free-fall areas shall be equipped with safety rails and toe boards.
- f. *Electrical Power.*
- (1) A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.
 - (2) If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.
- g. *Sampling Equipment Support.*
- (1) A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.
 - (a) The bracket shall be a standard 3 inch × 3 inch × one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
 - (b) A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
 - (c) The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
 - (2) A complete monorail or dual rail arrangement may be substituted for the eyebolt and bracket.
 - (3) When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]

7. Frequency of Compliance Tests: The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

a. *General Compliance Testing.*

1. 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

**SECTION 4. APPENDIX D
COMMON TESTING REQUIREMENTS**

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 sub-subparagraph 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) 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 paragraph 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, 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 air permitting pursuant to subsection 62-210.300(3), F.A.C.; units determined to be insignificant pursuant to subparagraph 62-213.300(2)(a)1., F.A.C., or paragraph 62-213.430(6)(b), F.A.C.; or units permitted under the General Permit provisions in paragraph 62-210.300(4)(a) or Rule 62-213.300, F.A.C., unless the general permit specifically requires such testing.
- b. *Special Compliance Tests.* When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it 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.
 - 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-

**SECTION 4. APPENDIX D
COMMON TESTING REQUIREMENTS**

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 paragraph 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.]

RECORDS AND REPORTS

8. 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 on the results of each such test.
- b. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- c. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department 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.

**SECTION 4. APPENDIX D
COMMON TESTING REQUIREMENTS**

18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

SECTION 4. APPENDIX E
NSPS SUBPART A, GENERAL PROVISIONS

Emissions units subject to a New Source Performance Standard of 40 CFR 60 are also subject to the applicable requirements of Subpart A, the General Provisions, including:

- § 60.1 Applicability.
- § 60.2 Definitions.
- § 60.3 Units and abbreviations.
- § 60.4 Address.
- § 60.5 Determination of construction or modification.
- § 60.6 Review of plans.
- § 60.7 Notification and Record Keeping.
- § 60.8 Performance Tests.
- § 60.9 Availability of information.
- § 60.10 State Authority.
- § 60.11 Compliance with Standards and Maintenance Requirements.
- § 60.12 Circumvention.
- § 60.13 Monitoring Requirements.
- § 60.14 Modification.
- § 60.15 Reconstruction.
- § 60.16 Priority List.
- § 60.17 Incorporations by Reference.
- § 60.18 General Control Device Requirements.
- § 60.19 General Notification and Reporting Requirements.

Individual subparts may exempt specific equipment or processes from some or all of these requirements. The general provisions may be provided in full upon request.

SECTION 4. APPENDIX F
NSPS SUBPART Y, COAL PREPARATION PLANTS

SUBPART Y—STANDARDS OF PERFORMANCE FOR COAL PREPARATION PLANTS

§ 60.250 APPLICABILITY AND DESIGNATION OF AFFECTED FACILITY.

(a) The provisions of this subpart are applicable to any of the following affected facilities in coal preparation plants which process more than 181 Mg (200 tons) per day: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, and coal transfer and loading systems.

(b) Any facility under paragraph (a) of this section that commences construction or modification after October 24, 1974, is subject to the requirements of this subpart.

[42 FR 37938, July 25, 1977; 42 FR 44812, Sept. 7, 1977, as amended at 65 FR 61757, Oct. 17, 2000]

§ 60.251 DEFINITIONS.

As used in this subpart, all terms not defined herein have the meaning given them in the Act and in subpart A of this part.

(a) *Coal preparation plant* means any facility (excluding underground mining operations) which prepares coal by one or more of the following processes: breaking, crushing, screening, wet or dry cleaning, and thermal drying.

(b) *Bituminous coal* means solid fossil fuel classified as bituminous coal by ASTM Designation D388-77, 90, 91, 95, or 98a (incorporated by reference—see §60.17).

(c) *Coal* means all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM Designation D388-77, 90, 91, 95, or 98a (incorporated by reference—see §60.17).

(d) *Cyclonic flow* means a spiraling movement of exhaust gases within a duct or stack.

(e) *Thermal dryer* means any facility in which the moisture content of bituminous coal is reduced by contact with a heated gas stream which is exhausted to the atmosphere.

(f) *Pneumatic coal-cleaning equipment* means any facility which classifies bituminous coal by size or separates bituminous coal from refuse by application of air stream(s).

(g) *Coal processing and conveying equipment* means any machinery used to reduce the size of coal or to separate coal from refuse, and the equipment used to convey coal to or remove coal and refuse from the machinery. This includes, but is not limited to, breakers, crushers, screens, and conveyor belts.

(h) *Coal storage system* means any facility used to store coal except for open storage piles.

(i) *Transfer and loading system* means any facility used to transfer and load coal for shipment.

[41 FR 2234, Jan. 15, 1976, as amended at 48 FR 3738, Jan. 27, 1983; 65 FR 61757, Oct. 17, 2000]

§ 60.252 STANDARDS FOR PARTICULATE MATTER.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any thermal dryer gases which:

(1) Contain particulate matter in excess of 0.070 g/dscm (0.031 gr/dscf).

(2) Exhibit 20 percent opacity or greater.

(b) On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any pneumatic coal cleaning equipment, gases which:

SECTION 4. APPENDIX F
NSPS SUBPART Y, COAL PREPARATION PLANTS

(1) Contain particulate matter in excess of 0.040 g/dscm (0.017 gr/dscf).

(2) Exhibit 10 percent opacity or greater.

(c) On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

[41 FR 2234, Jan. 15, 1976, as amended at 65 FR 61757, Oct. 17, 2000]

§ 60.253 MONITORING OF OPERATIONS.

(a) The owner or operator of any thermal dryer shall install, calibrate, maintain, and continuously operate monitoring devices as follows:

(1) A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within ± 1.7 °C (± 3 °F).

(2) For affected facilities that use venturi scrubber emission control equipment:

(i) A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ± 1 inch water gauge.

(ii) A monitoring device for the continuous measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ± 5 percent of design water supply pressure. The pressure sensor or tap must be located close to the water discharge point. The Administrator may be consulted for approval of alternative locations.

(b) All monitoring devices under paragraph (a) of this section are to be recalibrated annually in accordance with procedures under §60.13(b).

[41 FR 2234, Jan. 15, 1976, as amended at 54 FR 6671, Feb. 14, 1989; 65 FR 61757, Oct. 17, 2000]

§ 60.254 TEST METHODS AND PROCEDURES.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

(b) The owner or operator shall determine compliance with the particular matter standards in §60.252 as follows:

(1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). Sampling shall begin no less than 30 minutes after startup and shall terminate before shutdown procedures begin.

(2) Method 9 and the procedures in §60.11 shall be used to determine opacity.

Livingston, Sylvia

From: Nguyen, Andrew T. [atnguyen@tecoenergy.com]
Sent: Friday, December 12, 2008 1:04 PM
To: Livingston, Sylvia; Bishop, Ron D.; Burrows, Byron T.; Ward, Julie M.
Cc: 'Campbell@epchc.org'; 'Lee@epchc.org'; Nasca, Mara; 'forney.kathleen@epa.gov'; Gibson, Victoria
Subject: Re: TECO Big Bend Station; 0570039-041-AC

Thank you. This email was received.

Andrew (Thuy) Nguyen
Tampa Electric-EHS Air Programs
Cell: 813-309-1341
Office: 813-228-4654
Internal Ext.: 34654
ATNguyen@TECOenergy.com

----- Original Message -----

From: Livingston, Sylvia <Sylvia.Livingston@dep.state.fl.us>
To: Bishop, Ron D.; Burrows, Byron T.; Ward, Julie M.; Nguyen, Andrew T.
Cc: Jerry Campbell (E-mail) <Campbell@epchc.org>; Diana Lee (E-mail) <Lee@epchc.org>; Nasca, Mara <Mara.Nasca@dep.state.fl.us>; forney.kathleen@epa.gov <forney.kathleen@epa.gov>; Gibson, Victoria <Victoria.Gibson@dep.state.fl.us>
Sent: Fri Dec 12 12:59:47 2008
Subject: TECO Big Bend Station; 0570039-041-AC

Dear Sir/ Madam:

Attached is the official Notice of Draft Permit for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send". We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0570039.041.AC.D_pdf.zip
<http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0570039.041.AC.D_pdf.zip>

Owner/Company Name: TAMPA ELECTRIC COMPANY Facility Name: BIG BEND STATION Project Number: 0570039-041-AC Permit Status: DRAFT Permit Activity: CONSTRUCTION/ RAILCAR UNLOADING PROJECT Facility County: HILLSBOROUGH Processor: Cleve Holladay

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at <http://www.dep.state.fl.us/air/eproducts/apds/default.asp>
<<http://www.dep.state.fl.us/air/eproducts/apds/default.asp>> .

Permit project documents are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or

Livingston, Sylvia**From:** Burrows, Byron T. [BTBurrows@tecoenergy.com]**Sent:** Fri 12/12/2008 1:20 PM**To:** Livingston, Sylvia**Cc:****Subject:** Re: TECO Big Bend Station; 0570039-041-AC**Attachments:**

Received and can open. Thanks!

From Blackberry

Byron Burrows

Mobile: 813.230.3445

----- Original Message -----

From: Livingston, Sylvia <Sylvia.Livingston@dep.state.fl.us>

To: Bishop, Ron D.; Burrows, Byron T.; Ward, Julie M.; Nguyen, Andrew T.

Cc: Jerry Campbell (E-mail) <Campbell@epchc.org>; Diana Lee (E-mail) <Lee@epchc.org>; Nasca, Mara <Mara.Nasca@dep.state.fl.us>; forney.kathleen@epa.gov <forney.kathleen@epa.gov>; Gibson, Victoria <Victoria.Gibson@dep.state.fl.us>

Sent: Fri Dec 12 12:59:47 2008

Subject: TECO Big Bend Station; 0570039-041-AC

Dear Sir/ Madam:

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Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0570039.041.AC.D_pdf.zip

<http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0570039.041.AC.D_pdf.zip>

Owner/Company Name: TAMPA ELECTRIC COMPANY

Facility Name: BIG BEND STATION

Project Number: 0570039-041-AC

Permit Status: DRAFT

Permit Activity: CONSTRUCTION/ RAILCAR UNLOADING PROJECT

Facility County: HILLSBOROUGH

Processor: Cleve Holladay

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at

<http://www.dep.state.fl.us/air/eproducts/apds/default.asp>

<<http://www.dep.state.fl.us/air/eproducts/apds/default.asp>> .

Permit project documents are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the

Florida Department of Environmental Protection

Memorandum

TO: Joe Kahn, Division of Air Resource Management

THROUGH Trina Vielhauer, Bureau of Air Regulation SA for

THROUGH: Syed Arif, New Source Review Section SA

FROM: Cleve Holladay, New Source Review Section SA for

DATE: December 30, 2008

SUBJECT: Project No. 0570039-041-AC
Tampa Electric Company
Big Bend Station
Railcar Coal Unloading Project

The Final Permit for this project is attached for your approval and signature, which authorizes the construction of a railcar coal unloading system designed to offset and complement the existing coal conveying system currently being used for transferring coal from barges to the solid fuel yard at the existing facility. There will be a railcar unloading building that is enclosed (except for the railcar entrance and exit openings). Once the coal is discharged from the railcars, it will drop through a stationary screen and into coal collecting hoppers. From there the coal will be discharged into a network of conveyors that will transfer the coal to existing conveyors P1 or F1 in the solid fuel yard. The construction will take place at the existing Big Bend Station located at 13031 Wyandotte Road in Apollo Beach, Hillsborough County, Florida. The project results in a minor source air construction permit and was not subject to Prevention of Significant Deterioration (PSD) preconstruction review.

The Department distributed an Intent to Issue Permit package on December 12, 2008. The applicant published the Public Notice of Intent to Issue in The Tampa Tribune on December 15, 2008. The Department received the proof of publication on December 19, 2008. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed. Minor comments were received from the applicant which has been addressed in the final determination. No comments on the Draft Permit were received from the public, Environmental Protection Agency or the Environmental Protection Commission of Hillsborough County.

I recommend your approval of the attached Final Permit for this project.

Attachments

FINAL DETERMINATION

PERMITTEE

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

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation, New Source Review Section
2600 Blair Stone Road, MS #5505
Tallahassee, Florida 32399-2400

PROJECT

Project No. 0570039-041-AC
Big Bend Station

This project authorizes the construction of a railcar coal unloading system designed to offset and complement the existing coal conveying system currently being used for transferring coal from barges to the solid fuel yard at the existing facility. There will be an enclosed railcar unloading building and a conveying system that will transfer the coal to existing conveyors in the solid fuel yard. The construction will take place at the existing Big Bend Station located at 13031 Wyandotte Road in Apollo Beach, Hillsborough County, Florida. The project results in a minor source air construction permit and was not subject to Prevention of Significant Deterioration (PSD) preconstruction review.

NOTICE AND PUBLICATION

The Department distributed an Intent to Issue Permit package on December 12, 2008. The applicant published the Public Notice of Intent to Issue in The Tampa Tribune on December 15, 2008. The Department received the proof of publication on December 19, 2008. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed.

COMMENTS

No comments on the Draft Permit were received from the public, Environmental Protection Agency or the Environmental Protection Commission of Hillsborough County. Minor comments were received from the applicant by e-mail. These comments are summarized below with the Department's corresponding responses.

1. *Comment.* The applicant stated in the draft permit, page 6 of 8, Condition 3 that the first sentence should read: The maximum unloading rate is 4000 tons per hour (24-hour **rolling** average).

Response: The Department added **rolling** as requested in Condition 3.

2. *Comment.* The applicant stated in the draft permit, page 6 of 8, Condition 3 that the second sentence should be changed

From: The maximum annual transfer for **both** railcar **and** barge unloading operations is 8,000,000 tons per year.

To: The maximum annual transfer for **the** railcar unloading operations is 8,000,000 tons per year.

Response: The Department changed the sentence in Condition 3 as requested as this project relates to only railcar unloading operations.

FINAL DETERMINATION

3. *Comment.* The applicant stated in the draft permit, page 6 of 8, Condition 7 that the word **hopper** should be replaced with *conveying system*.

Response: The Department changed the wording as requested in Condition 7.

CONCLUSION

Only the minor revisions described above were made to the final permit. The final action of the Department is to issue the permit with the changes described above.

NOTICE OF FINAL PERMIT


CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final Determination and the Final Permit) was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on 12/31/08 to the persons listed below.

- Mr. Ron Bishop, Tampa Electric Company (rbishop@tecoenergy.com)
- Mr. Byron T. Burrows, Tampa Electric Company (btburrows@tecoenergy.com)
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- Ms. Mara Nasca, DEP-SWD (mara.nasca@dep.state.fl.us)
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- Ms. Vickie Gibson, DEP-BAR (victoria.gibson@dep.state.fl.us) (for read file)

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.



(Clerk)

12/31/08
(Date)



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

PERMITTEE:

Tampa Electric Company
Post Office Box 111
Tampa, Florida 33601-0111

Authorized Representative:
Mr. Ron Bishop, Director

Project No. 0570039-041-AC
Big Bend Station
Railcar Unloading Project
SIC No. 4911
Permit Expires December 31, 2010

PROJECT AND LOCATION

This permit authorizes the construction and operation of a Railcar Coal Unloading System designed to offset and/or complement the existing coal conveying system currently being used for transferring coal from oceangoing barges to the solid fuel yard. The existing facility is located at 13031 Wyandotte Road in Apollo Beach, Hillsborough County. The map coordinates are UTM Zone 17, 361.78 km East and 3075.10 km North.

STATEMENT OF BASIS

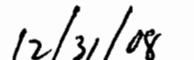
This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The project was processed in accordance with the requirements of Rule 62-212.400, F.A.C., the preconstruction review program for the Prevention of Significant Deterioration (PSD) of Air Quality. The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

CONTENTS

- Section I. General Information
- Section II. Administrative Requirements
- Section III. Emissions Units Specific Conditions
- Section IV. Appendices



Joseph Kahn, Director
Division of Air Resource Management



Effective Date

SECTION I. GENERAL INFORMATION

FACILITY DESCRIPTION

The Tampa Electric Company's Big Bend Station (Big Bend) is a nominal 2,028 MW existing electrical utility plant located in Apollo Beach, Florida. The facility produces electricity for distribution to the grid as a saleable product.

The regulated emissions units at Big Bend include the following: four steam boilers (Units Nos. 1 - 4); four steam turbines; three simple-cycle combustion turbines (SCCT Nos. 1 - 3); solid fuels, fly ash, limestone, gypsum, slag, and bottom ash storage and handling facilities, and fuel oil storage tanks. Units Nos. 1, 2, 3, and 4 have nominal maximum heat inputs of 4037, 3996, 4115 and 4330 million British thermal units (MMBtu) per hour, respectively. Units Nos. 1 - 4 are fired with coal and with petroleum coke (petcoke) in a mixture with coal up to 20.0% petcoke/ 80.0% coal (by weight), or a coal blended with coal residual generated from the Polk Power Station, or a coal/petcoke blend further blended with coal residual generated from the Polk Power Station. The SCCT are fired with No. 2 distillate fuel oil. In addition, there is a ship surface coating operation. The facility has emissions units that are Acid Rain Units and regulated under the Florida Electrical Power Plant Siting Act.

PROJECT DESCRIPTION

The proposed project is to construct and operate a Railcar Coal Unloading System designed to offset and/or complement the existing coal conveying system currently being used for transferring coal from oceangoing barges to the solid fuel yard (Emission Unit ID No. 010).

The Railcar Coal Unloading System will consist of one railcar unloading building and a series of conveyors that connect to the existing P1 or F1 conveyors of the solid fuel yard.

The railcar unloading building is an enclosed structure (except for the railcar entrance and exit openings), designed to receive coal as a slow and controlled continuous coal unloading process. The railcar will drop the coal as each railcar unit enters the unloading building and will continue to discharge the coal from its tapered bottom chutes until the railcar reaches the exit end of the building. Once the coal is discharged from the railcars, it will drop through a stationary safety screen and into coal collecting hoppers. Each coal collecting hopper will have tapered discharge chutes equipped with slide gates. From the coal collecting hoppers, the coal will fall directly on a variable speed belt designed to feed coal to the series of conveyors that will transfer the coal to the existing P1 or F1 conveyors of the solid fuel yard. Fugitive emission controls will include building/transfer point enclosure and water/surfactant dust suppression system.

SECTION I. GENERAL INFORMATION

REGULATORY CLASSIFICATION

Title III: The facility is a major source of hazardous air pollutants (HAP).

Title IV: The facility has units subject to the Acid Rain provisions of the Clean Air Act.

Title V: The facility is a Title V or "Major Source of Air Pollution" in accordance with Rule 62-210.200(Definitions) and Chapter 62-213, F.A.C.

PSD: The facility is a PSD-major facility pursuant to Chapter 62-212, F.A.C.

New Source Performance Standards (NSPS): The Railcar Coal Unloading System is subject to 40 Code of Federal Regulations (CFR) Part 60, Subpart Y (Standards of Performance for Coal Preparation Plants).

APPENDICES

The following Appendices are attached as part of this permit.

Appendix A.	Citation Formats and Glossary of Common Terms
Appendix B.	General Conditions
Appendix C.	Common Conditions
Appendix D.	Common Testing Requirements
Appendix E.	NSPS Subpart A, General Provisions
Appendix F.	NSPS Subpart Y, Requirements for Coal Preparation Plants

RELEVANT DOCUMENTS

The following relevant documents are not a part of this permit, but helped form the basis for this permitting action: the permit application and additional information received to make it complete; the draft permit package including the Department's Technical Evaluation and Preliminary Determination; publication and comments; and the Department's Final Determination.

SECTION II. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: All documents related to applications for permits to construct, operate or modify emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (Department), at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. Copies of all such documents shall also be submitted to the Compliance Authority.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Hillsborough County Environmental Protection Commission (HCEPC) office. The mailing address of the HCEPC's Air Quality Division (AQD) is 3629 Queen Palm Drive, Tampa, Florida 33619. The AQD's telephone number is 813/627-2600 and facsimile number is 813/627-2660.
3. General Conditions: The permittee shall operate under the attached General Conditions listed in Appendix B of this permit. General Conditions are binding and enforceable pursuant to Chapter 403, F.S. [Rule 62-4.160, F.A.C.]
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S., and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C., and follow the application procedures in Chapter 62-4, F.A.C. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
5. Construction and Expiration: The permit expiration date includes sufficient time to complete construction, perform required testing, submit test reports, and submit an application for a Title V operation permit to the Department. Approval to construct shall become invalid if construction is not completed within a reasonable time. The Department may extend the expiration date upon a satisfactory showing that an extension is justified. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080, 62-210.300(1) and 62-212.400(12), F.A.C.]
6. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
7. Source Obligation:
 - a. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
 - b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

SECTION II. ADMINISTRATIVE REQUIREMENTS

8. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. This permit authorizes construction of the referenced facilities. [Chapters 62-210 and 62-212, F.A.C.]
9. Title V Air Operation Permit: This permit authorizes construction of the permitted emissions unit and initial operation to determine compliance with Department rules. A Title V Air Operation Permit is required for regular operation of the permitted emission units. The permittee shall apply for and obtain a Title V operation permit in accordance with Rule 62-213.420, F.A.C. To apply for a Title V Air Operation Permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Department's Bureau of Air Regulation and a copy to the Compliance Authority. [Rules 62-4.030, 62-4.050 and 62-4.220, and Chapter 62-213, F.A.C.]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS
RAILCAR COAL UNLOADING SYSTEM

The specific conditions of this subsection apply to the following emission units after construction is complete.

ARMS ID	Emission Unit Description
010	Railcar Coal Unloading Building
010	Railcar Coal Unloading Conveying System

The series of conveyors associated with the Railcar Coal Unloading System will consist of conveyors C-10, C-11, C-12, C-13, C-14, C-15 and C-16. The fugitive emission controls will include hoods on all belt conveyors, all transfer points will be enclosed, and fog type dust suppression system. The coal conveying system is designed for a transport rate of 4,000 tons per hour (TPH) (24-hour rolling average).

APPLICABLE STANDARDS AND REGULATIONS

1. NSPS Requirements: The Railcar Coal Unloading Building shall comply with the applicable NSPS in 40 CFR 60 including: Subpart A (General Provisions) and Subpart Y (Standards of Performance for Standards of Performance for Coal Preparation Plants). See Appendix E for the NSPS Subpart A provisions and Appendix F for the NSPS Subpart Y provisions. Some separate reporting and monitoring may be required by the individual subparts. [Rule 62-204.800(7)(b), F.A.C., and 40 CFR 60, Subparts A and Y]

EQUIPMENT DESCRIPTION

2. Railcar Coal Unloading System: The permittee is authorized to install and operate a Railcar Coal Unloading System designed to offset and complement the existing coal conveying system currently being used for transferring coal from oceangoing barges to the solid fuel yard (Emission Unit ID No. 010).

[Application 0570039-041-AC; and Rules 62-210.200(Definitions-Potential to Emit (PTE)) and 62-4.070(3), F.A.C.]

PERFORMANCE REQUIREMENTS

3. Permitted Capacity: The maximum unloading rate is 4000 tons per hour (24-hour rolling average). The maximum annual transfer for the railcar unloading operations is 8,000,000 tons per year. [Rule 62-210.200(PTE), F.A.C.]

4. Restricted Operation: The hours of operation are not limited (8760 hours per year).

[Rules 62-4.070(3) and 62-210.200 (PTE), F.A.C.]

EMISSIONS STANDARDS

5. Fugitive Dust Emissions: During the construction period, fugitive dust emissions shall be minimized by techniques such as covering, confining and/or the application of water or dust suppressants to the affected areas, or removal of particulate matter from roads and other paved areas to prevent re-entrainment, as necessary. [Rule 62-296.320(4)(c), F.A.C.]
6. Railcar Coal Unloading Building: The permittee shall install a water/surfactant dust suppression system to control particulate matter emissions from the railcar coal unloading hopper. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C. and Application No. 0570039-041-AC]
7. Railcar Coal Unloading Conveying System: The permittee shall install a water/surfactant dust suppression system to control particulate matter emissions from the railcar coal unloading conveying system. [Rules 62-4.070, F.A.C.]

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS
RAILCAR COAL UNLOADING SYSTEM

8. Opacity: As determined by EPA Method 9, visible emissions from the railcar coal unloading system shall not exceed 20% opacity.
[40 CFR 60, Subpart Y (Standards of Performance for Coal Preparation Plants)]
9. PM Control Requirement. If the initial performance visible emissions test results in greater than 5% opacity, the permittee shall perform a stack test for particulate matter (PM) to evaluate if further PM controls are needed. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

Permitting Note: In addition, the requirements in 40 CFR 60, New Source Performance Standard (NSPS) Subpart Y for Coal Preparation Plants, have been proposed to be amended on April 28, 2008 and would be applicable to all sources addressed in this standard and constructed after that date. These amended standards, including installing a baghouse on the railcar unloading building may become applicable to this project when these standards become final and are adopted in the Florida rules.

TESTING REQUIREMENTS

10. Initial Compliance Tests: The Railcar Coal Unloading Building vents shall be tested to demonstrate initial compliance with the emissions standard for visible emissions. The initial tests shall be conducted within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit.
[Rules 62-4.070(3) and 62-297.310(7)(a)1, F.A.C.]
11. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), the Railcar Coal Unloading Building vents shall be tested to demonstrate compliance with the emissions standard for visible emissions. [Rule 62-297.310(7)(a)4, F.A.C.]
12. Test Requirements: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(7)(a)9, F.A.C.]
13. Unconfined Particulate Emissions: During the construction period, unconfined PM emissions shall be minimized by dust suppressing techniques such as covering, confining, or applying water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]
14. Standard Testing Requirements: See Appendix D (Common Testing Requirements) of this permit for notification, testing, recordkeeping and reporting requirements regarding a performance test.
[Rules 62-204.800 and 62-297.100, F.A.C.; Appendix D of this permit; and 40 CFR 60, Appendix A]
15. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1-4	Methods for Determining Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content: These methods shall be performed as necessary to support other methods. (IF REQUIRED)
5	Method for Determining Particulate Matter Emissions (IF REQUIRED)
9	Visible Emissions Test

The methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used for compliance testing unless prior written approval is received from the Administrator of the Department's Emissions Monitoring Section in accordance with an alternate

SECTION III. EMISSIONS UNITS SPECIFIC CONDITIONS

RAILCAR COAL UNLOADING SYSTEM

sampling procedure pursuant to Rule 62-297.620, F.A.C. [Rule 62-204.800, F.A.C. and 40 CFR 60, Appendix A]

16. Testing Requirements: Initial and subsequent performance tests shall be conducted between 90% and 100% of permitted capacity in accordance with the requirements of Rule 62-297.310(2), F.A.C. [Rules 62-297.310(2) and (7)(a), F.A.C.; 40 CFR 60.8; and Appendix D of this permit]
17. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

REPORTING AND RECORDKEEPING REQUIREMENTS

18. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(8), F.A.C. and Appendix D of this permit]

SECTION 4. APPENDICES

CONTENTS

- Appendix A. Citation Formats and Glossary of Common Terms
- Appendix B. General Conditions
- Appendix C. Common Conditions
- Appendix D. Common Testing Requirements
- Appendix E. NSPS Subpart A, General Provisions
- Appendix F. NSPS Subpart Y, Requirements for Coal Preparation Plants

SECTION 4. APPENDIX A
CITATION FORMATS AND GLOSSARY OF COMMON TERMS

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: “AC” identifies the permit as an Air Construction Permit
“AO” identifies the permit as an Air Operation Permit
“123456” identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: “099” represents the specific county ID number in which the project is located
“2222” represents the specific facility ID number for that county
“001” identifies the specific permit project number
“AC” identifies the permit as an air construction permit
“AF” identifies the permit as a minor source federally enforceable state operation permit
“AO” identifies the permit as a minor source air operation permit
“AV” identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: “PSD” means issued pursuant to the preconstruction review requirements of the Prevention of Significant Deterioration of Air Quality
“FL” means that the permit was issued by the State of Florida
“317” identifies the specific permit project number

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CRF 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

acfm: actual cubic feet per minute

ARMS: Air Resource Management System (Department’s database)

BACT: best available control technology

Btu: British thermal units

CAM: compliance assurance monitoring

SECTION 4. APPENDIX A
CITATION FORMATS AND GLOSSARY OF COMMON TERMS

CEMS: continuous emissions monitoring system
cfm: cubic feet per minute
CFR: Code of Federal Regulations
CO: carbon monoxide
COMS: continuous opacity monitoring system
DEP: Department of Environmental Protection
Department: Department of Environmental Protection
dscfm: dry standard cubic feet per minute
EPA: Environmental Protection Agency
ESP: electrostatic precipitator (control system for reducing particulate matter)
EU: emissions unit
F.A.C.: Florida Administrative Code
F.D.: forced draft
F.S.: Florida Statutes
FGR: flue gas recirculation
Fl: fluoride
ft²: square feet
ft³: cubic feet
gpm: gallons per minute
gr: grains
HAP: hazardous air pollutant
Hg: mercury
I.D.: induced draft
ID: identification
kPa: kilopascals
lb: pound
MACT: maximum achievable technology
MMBtu: million British thermal units
MSDS: material safety data sheets
MW: megawatt
NESHAP: National Emissions Standards for Hazardous Air Pollutants
NO_x: nitrogen oxides
NSPS: New Source Performance Standards
O&M: operation and maintenance
O₂: oxygen

SECTION 4. APPENDIX A
CITATION FORMATS AND GLOSSARY OF COMMON TERMS

Pb: lead

PM: particulate matter

PM₁₀: particulate matter with a mean aerodynamic diameter of 10 microns or less

PSD: prevention of significant deterioration

psi: pounds per square inch

PTE: potential to emit

RACT: reasonably available control technology

RATA: relative accuracy test audit

SAM: sulfuric acid mist

scf: standard cubic feet

scfm: standard cubic feet per minute

SIC: standard industrial classification code

SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)

SO₂: sulfur dioxide

TPH: tons per hour

TPY: tons per year

UTM: Universal Transverse Mercator coordinate system

VE: visible emissions

VOC: volatile organic compounds

SECTION 4. APPENDIX B
GENERAL CONDITIONS

The permittee shall comply with the following general conditions from Rule 624.160, F.A.C.

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

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S.. Such evidence

SECTION 4. APPENDIX B
GENERAL CONDITIONS

shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.
11. This permit is transferable only upon Department approval in accordance with Rules 624.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - a. Compliance with New Source Performance Standards
14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - 1) The date, exact place, and time of sampling or measurements;
 - 2) The person responsible for performing the sampling or measurements;
 - 3) The dates analyses were performed;
 - 4) The person responsible for performing the analyses;
 - 5) The analytical techniques or methods used; and
 - 6) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION 4. APPENDIX C
COMMON CONDITIONS

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

1. **Plant Operation - Problems:** If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
2. **Circumvention:** The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
3. **Excess Emissions Allowed:** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
4. **Excess Emissions Prohibited:** Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
5. **Excess Emissions - Notification:** In case of excess emissions resulting from malfunctions, the permittee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
6. **VOC or OS Emissions:** No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
7. **Objectionable Odor Prohibited:** No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.]
8. **General Visible Emissions:** No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)I, F.A.C.]
9. **Unconfined Particulate Emissions:** During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

{Permitting Note: Rule 62-210.700 (Excess Emissions), F.A.C., cannot vary any NSPS or NESHAP provision.}

RECORDS AND REPORTS

10. **Records Retention:** All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]
11. **Annual Operating Report:** The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority as required by Rule 62-210.370(3)(c), F.A.C. [Rule 62-210.370(3), F.A.C.]

**SECTION 4. APPENDIX D
COMMON TESTING REQUIREMENTS**

Unless otherwise specified in the permit, the following testing requirements apply to all emissions units at the facility.

COMPLIANCE TESTING REQUIREMENTS

1. **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 two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]
2. **Operating Rate During Testing:** Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate 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. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]
3. **Calculation of Emission Rate:** For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
4. **Applicable Test Procedures**
 - a. *Required Sampling Time.*
 - (1) Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
 - (2) **Opacity Compliance Tests.** When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - (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 or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - c. *Calibration of Sampling Equipment.* Calibration of the sampling train equipment shall be conducted in accordance

**SECTION 4. APPENDIX D
COMMON TESTING REQUIREMENTS.**

with the schedule shown in Table 297.310-1, F.A.C.

- d. *Allowed Modification to EPA Method 5.* When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

[Rule 62-297.310(4), F.A.C.]

5. 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.]

6. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. All stack sampling facilities must also comply with all applicable Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

- a. *Permanent Test Facilities.* The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis, shall install and maintain permanent stack sampling facilities.
- b. *Temporary Test Facilities.* The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.
- c. *Sampling Ports.*
- (1) All sampling ports shall have a minimum inside diameter of 3 inches.
 - (2) The ports shall be capable of being sealed when not in use.
 - (3) The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.
 - (4) For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
 - (5) On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.
- d. *Work Platforms.*
- (1) Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.

**SECTION 4. APPENDIX D
COMMON TESTING REQUIREMENTS**

- (2) On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.
 - (3) On circular stacks with more than two sampling ports, the work platform shall extend 360 degrees around the stack.
 - (4) All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toe board, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.
- e. *Access to Work Platform.*
- (1) Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.
 - (2) Walkways over free-fall areas shall be equipped with safety rails and toe boards.
- f. *Electrical Power.*
- (1) A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.
 - (2) If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.
- g. *Sampling Equipment Support.*
- (1) A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.
 - (a) The bracket shall be a standard 3 inch × 3 inch × one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
 - (b) A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
 - (c) The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
 - (2) A complete monorail or dual rail arrangement may be substituted for the eyebolt and bracket.
 - (3) When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test.

[Rule 62-297.310(6), F.A.C.]

7. **Frequency of Compliance Tests:** The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
- a. *General Compliance Testing.*
1. 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

**SECTION 4. APPENDIX D
COMMON TESTING REQUIREMENTS**

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 sub-subparagraph 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) 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 paragraph 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, 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 air permitting pursuant to subsection 62-210.300(3), F.A.C.; units determined to be insignificant pursuant to subparagraph 62-213.300(2)(a)1., F.A.C., or paragraph 62-213.430(6)(b), F.A.C.; or units permitted under the General Permit provisions in paragraph 62-210.300(4)(a) or Rule 62-213.300, F.A.C., unless the general permit specifically requires such testing.
- b. *Special Compliance Tests.* When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it 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.
 - 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-

**SECTION 4. APPENDIX D
COMMON TESTING REQUIREMENTS**

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 paragraph 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.]

RECORDS AND REPORTS

8. 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 on the results of each such test.
- b. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- c. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department 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.

**SECTION 4. APPENDIX D
COMMON TESTING REQUIREMENTS**

18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

SECTION 4. APPENDIX E
NSPS SUBPART A, GENERAL PROVISIONS

Emissions units subject to a New Source Performance Standard of 40 CFR 60 are also subject to the applicable requirements of Subpart A, the General Provisions, including:

- § 60.1 Applicability.
- § 60.2 Definitions.
- § 60.3 Units and abbreviations.
- § 60.4 Address.
- § 60.5 Determination of construction or modification.
- § 60.6 Review of plans.
- § 60.7 Notification and Record Keeping.
- § 60.8 Performance Tests.
- § 60.9 Availability of information.
- § 60.10 State Authority.
- § 60.11 Compliance with Standards and Maintenance Requirements.
- § 60.12 Circumvention.
- § 60.13 Monitoring Requirements.
- § 60.14 Modification.
- § 60.15 Reconstruction.
- § 60.16 Priority List.
- § 60.17 Incorporations by Reference.
- § 60.18 General Control Device Requirements.
- § 60.19 General Notification and Reporting Requirements.

Individual subparts may exempt specific equipment or processes from some or all of these requirements. The general provisions may be provided in full upon request.

SECTION 4. APPENDIX F
NSPS SUBPART Y, COAL PREPARATION PLANTS

SUBPART Y—STANDARDS OF PERFORMANCE FOR COAL PREPARATION PLANTS

§ 60.250 APPLICABILITY AND DESIGNATION OF AFFECTED FACILITY.

(a) The provisions of this subpart are applicable to any of the following affected facilities in coal preparation plants which process more than 181 Mg (200 tons) per day: Thermal dryers, pneumatic coal-cleaning equipment (air tables), coal processing and conveying equipment (including breakers and crushers), coal storage systems, and coal transfer and loading systems.

(b) Any facility under paragraph (a) of this section that commences construction or modification after October 24, 1974, is subject to the requirements of this subpart.

[42 FR 37938, July 25, 1977; 42 FR 44812, Sept. 7, 1977, as amended at 65 FR 61757, Oct. 17, 2000]

§ 60.251 DEFINITIONS.

As used in this subpart, all terms not defined herein have the meaning given them in the Act and in subpart A of this part.

(a) *Coal preparation plant* means any facility (excluding underground mining operations) which prepares coal by one or more of the following processes: breaking, crushing, screening, wet or dry cleaning, and thermal drying.

(b) *Bituminous coal* means solid fossil fuel classified as bituminous coal by ASTM Designation D388-77, 90, 91, 95, or 98a (incorporated by reference—see §60.17).

(c) *Coal* means all solid fossil fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM Designation D388-77, 90, 91, 95, or 98a (incorporated by reference—see §60.17).

(d) *Cyclonic flow* means a spiraling movement of exhaust gases within a duct or stack.

(e) *Thermal dryer* means any facility in which the moisture content of bituminous coal is reduced by contact with a heated gas stream which is exhausted to the atmosphere.

(f) *Pneumatic coal-cleaning equipment* means any facility which classifies bituminous coal by size or separates bituminous coal from refuse by application of air stream(s).

(g) *Coal processing and conveying equipment* means any machinery used to reduce the size of coal or to separate coal from refuse, and the equipment used to convey coal to or remove coal and refuse from the machinery. This includes, but is not limited to, breakers, crushers, screens, and conveyor belts.

(h) *Coal storage system* means any facility used to store coal except for open storage piles.

(i) *Transfer and loading system* means any facility used to transfer and load coal for shipment.

[41 FR 2234, Jan. 15, 1976, as amended at 48 FR 3738, Jan. 27, 1983; 65 FR 61757, Oct. 17, 2000]

§ 60.252 STANDARDS FOR PARTICULATE MATTER.

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any thermal dryer gases which:

(1) Contain particulate matter in excess of 0.070 g/dscm (0.031 gr/dscf).

(2) Exhibit 20 percent opacity or greater.

(b) On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any pneumatic coal cleaning equipment, gases which:

SECTION 4. APPENDIX F
NSPS SUBPART Y, COAL PREPARATION PLANTS

(1) Contain particulate matter in excess of 0.040 g/dscm (0.017 gr/dscf).

(2) Exhibit 10 percent opacity or greater.

(c) On and after the date on which the performance test required to be conducted by §60.8 is completed, an owner or operator subject to the provisions of this subpart shall not cause to be discharged into the atmosphere from any coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal, gases which exhibit 20 percent opacity or greater.

[41 FR 2234, Jan. 15, 1976, as amended at 65 FR 61757, Oct. 17, 2000]

§ 60.253 MONITORING OF OPERATIONS.

(a) The owner or operator of any thermal dryer shall install, calibrate, maintain, and continuously operate monitoring devices as follows:

(1) A monitoring device for the measurement of the temperature of the gas stream at the exit of the thermal dryer on a continuous basis. The monitoring device is to be certified by the manufacturer to be accurate within ± 1.7 °C (± 3 °F).

(2) For affected facilities that use venturi scrubber emission control equipment:

(i) A monitoring device for the continuous measurement of the pressure loss through the venturi constriction of the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ± 1 inch water gauge.

(ii) A monitoring device for the continuous measurement of the water supply pressure to the control equipment. The monitoring device is to be certified by the manufacturer to be accurate within ± 5 percent of design water supply pressure. The pressure sensor or tap must be located close to the water discharge point. The Administrator may be consulted for approval of alternative locations.

(b) All monitoring devices under paragraph (a) of this section are to be recalibrated annually in accordance with procedures under §60.13(b).

[41 FR 2234, Jan. 15, 1976, as amended at 54 FR 6671, Feb. 14, 1989; 65 FR 61757, Oct. 17, 2000]

§ 60.254 TEST METHODS AND PROCEDURES.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

(b) The owner or operator shall determine compliance with the particulate matter standards in §60.252 as follows:

(1) Method 5 shall be used to determine the particulate matter concentration. The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). Sampling shall begin no less than 30 minutes after startup and shall terminate before shutdown procedures begin.

(2) Method 9 and the procedures in §60.11 shall be used to determine opacity.

Livingston, Sylvia

From: Nguyen, Andrew T. [atnguyen@tecoenergy.com]
Sent: Wednesday, December 31, 2008 4:28 PM
To: Livingston, Sylvia
Subject: RE: TECO-BIG BEND STATION; 0570039-041-AC

Thank you Sylvia!

Andrew (Thuy) Nguyen

Senior Engineer
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From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Wednesday, December 31, 2008 4:24 PM
To: Bishop, Ron D.
Cc: Ward, Julie M.; Nguyen, Andrew T.; campbell@epchc.org; Lee@epchc.org; Nasca, Mara; forney.kathleen@epa.gov; Gibson, Victoria; Arif, Syed; Holladay, Cleve
Subject: TECO-BIG BEND STATION; 0570039-041-AC

Dear Sir/ Madam:

Attached is the official **Notice of Final Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send". **We must receive verification that you are able to access the documents.** Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0570039.041.AC.F_pdf.zip

Owner/Company Name: TAMPA ELECTRIC COMPANY
Facility Name: BIG BEND STATION
Project Number: 0570039-041-AC
Permit Status: FINAL
Permit Activity: CONSTRUCTION
Facility County: HILLSBOROUGH
Processor: Cleve Holladay

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other

Livingston, Sylvia

From: Ward, Julie M. [jward@tecoenergy.com]
Sent: Wednesday, January 07, 2009 9:07 AM
To: Livingston, Sylvia
Cc: Bishop, Ron D.
Subject: RE: TECO-BIG BEND STATION; 0570039-041-AC

We have received this email.

Thank you

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Wednesday, January 07, 2009 9:06 AM
To: Bishop, Ron D.; Ward, Julie M.
Subject: FW: TECO-BIG BEND STATION; 0570039-041-AC

We have not received confirmation that you were able to access the documents attached to this December 31st e-mail, as well as the documents provided in the link (http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0570039.041.AC.F_pdf.zip) referenced in the email. Please confirm receipt by opening the attachment and clicking on the link to the permit documents, and sending a reply to me.

The Division of Air Resource Management is sending electronic versions of these documents rather than sending them Return Receipt Requested via the US Postal service. Your "receipt confirmation" reply serves the same purpose as tracking the receipt of the signed "Return Receipt" card from the US Postal Service. Please let me know if you have any questions.

Thanks,

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-9506
sylvia.livingston@dep.state.fl.us

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

From: Livingston, Sylvia
Sent: Wednesday, December 31, 2008 4:24 PM
To: 'rbishop@tecoenergy.com'
Cc: 'jward@tecoenergy.com'; 'atnguyen@tecoenergy.com'; 'campbell@epchc.org'; 'Lee@epchc.org'; Nasca, Mara; 'forney.kathleen@epa.gov'; Gibson, Victoria; Arif, Syed; Holladay, Cleve
Subject: TECO-BIG BEND STATION; 0570039-041-AC

Dear Sir/ Madam:

Attached is the official **Notice of Final Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s)

provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send". **We must receive verification that you are able to access the documents.** Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Click on the following link to access the permit project documents:

http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0570039.041.AC.F_pdf.zip

Owner/Company Name: TAMPA ELECTRIC COMPANY

Facility Name: BIG BEND STATION

Project Number: 0570039-041-AC

Permit Status: FINAL

Permit Activity: CONSTRUCTION

Facility County: HILLSBOROUGH

Processor: Cleve Holladay

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "*Air Permit Documents Search*" website at

<http://www.dep.state.fl.us/air/eproducts/apds/default.asp> .

Permit project documents are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation at (850)488-0114.

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-9506
sylvia.livingston@dep.state.fl.us

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <<http://www.adobe.com/products/acrobat/readstep.html>> .

Livingston, Sylvia

From: Burrows, Byron T. [BTBurrows@tecoenergy.com]
To: Livingston, Sylvia
Sent: Wednesday, December 31, 2008 6:02 PM
Subject: Read: TECO-BIG BEND STATION; 0570039-041-AC

Your message

To: BTBurrows@tecoenergy.com
Subject:

was read on 12/31/2008 6:02 PM.



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

October 21, 2008

ELECTRONIC MAIL - RECEIVED RECEIPT REQUESTED

Ms. Karen Sheffield, General Manager
Tampa Electric Company
P.O. Box 111
Tampa, Florida 33601

Re: **Request for Additional Information**
Project No. 0570039-041-AC
Big Bend Railcar Unloading Project

Dear Ms. Sheffield:

On September 22, 2008, the Department received your application for an air construction permit for a Railcar Unloading Project at Big Bend Station. The application is incomplete. In order to continue processing your application, the Department will need the additional information requested below. Should your response to any of the items below require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. Condition B.5.i.b.ii of Title V permit 0570039-028-AV limits Big Bend Station to a facility wide particulate matter emission limit of 2,767 tons per year, which if relaxed by at least 1 ton per year, will result in a reevaluation of PSD applicability for the facility. Please show that emissions from the new railcar unloading project will not result in exceeding this limit.
2. Please show how much coal has been received annually in the past five years and provide the PM/PM₁₀ emissions from coal unloading for these years. Choose the values from two consecutive years during the five year period and compare them with a maximum coal unloading annual throughput (which could become a permit condition), in order to show there will be no increase in projected emissions which would exceed the PSD significant rates for PM/PM₁₀.
3. Please address the attached comments from the Environmental Protection Commission of Hillsborough County (EPCHC).

The Department will resume processing your application after receipt of the requested information. Rule 62-4.050(3), F.A.C., requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. For any material changes to the application, please include a new certification statement by the authorized representative or responsible official. You are reminded that Rule 62-4.055(1), F.A.C. requires applicants to respond to requests for information within 90 days or provide a written request for an additional period of time to submit the information.

If you have any questions regarding this matter, please call Cleve Holladay at 850/921-8986 or me at 850/921-9528.

Sincerely,

Syed Arif, P.E.
Bureau of Air Regulation
New Source Review Section

Ms. Karen Sheffield
October 21, 2008
Page 2 of 2

Attachment enclosed

Sent by Electronic Mail to the following persons:

Ms. Karen Sheffield, Tampa Electric Company (kasheffield@tecoenergy.com)

Mr. Byron Burrows, Tampa Electric Company (btburrows@tecoenergy.com)

Ms. Julie Ward, Tampa Electric Company (jmward@tecoenergy.com)

Mr. Andrew Thuy Nguyen (atnguyen@tecoenergy.com)

Mr. Jerry Campbell, Hillsborough County (cambell@epchc.org)

Ms. Mara Nasca, DEP-SWD (mara.nasca@dep.state.fl.us)

Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)

MEMORANDUM

DATE: October 21, 2008

TO: Cleve Holladay - FDEP

FROM: Noel Morera, P.E. **THRU:** Diana M. Lee, P.E.
Sterlin Woodard, P.E.

SUBJECT: Tampa Electric Project No. 0570039-041-AC

Below are our questions regarding TECO's permit application relating to the installation of a railcar unloading system at the Big Bend Station as part of our completeness review of this project.

Please be advised that the Environmental Protection Commission of Hillsborough County (EPC), as delegated by the Florida Department of Environmental Protection (DEP), has completed their initial review of TECO's permit application received on September 22, 2008 for the Railcar Unloading project (Project No. 0570039-041-AC). In order to complete the review process the following additional information is being requested pursuant to Chapter 62-4.055(1), F.A.C.:

1. In Section III. Emission Unit Information, under Subsection B Emission Capacity Information, the maximum process or throughput rate is listed as 4000 tons/hour. Rule 62-210.200(244) "Potential to Emit" FAC. is defined as the maximum capacity of an emission unit or facility to emit under its physical and operational design. Therefore, in order to determine the "Potential to Emit" of the emission unit, please provide the following design information: conveyor belt width, maximum conveyor belt speed, and number of belt plies. In addition, please provide manufacturer's specifications verifying the design information submitted.
2. On Drawing No. SK-10 of Attachment B of the Application, TECO submitted a process flow diagram, which labels the Track Hopper for the railcar unloading as a "GRIZZLY". Is this a vibrating screen? If so, please provide the following design

information in order to determine the emission unit's "Potential to Emit" as referenced in Equation 19-7 of Perry's Chemical Engineers' Handbook, 7th Edition: screen area, throughflow rate, unit capacity, open-area factor, slotted-area factor. In addition, please provide manufacturer's specifications verifying the design information submitted.

3. On Page 2 of Attachment G, TECO submitted PM calculations for the railcar unloading process using factors that were from AP-42, Section 13.2.4, Aggregate Handling and Storage Piles, that resulted in a PM emission factor of 0.00092 (lb PM/ton). The estimated total emissions for this project, based on this emission factor, are 2.8 tons/year of PM. However, Rule 62-210.370(2)(d)1., F.A.C., states that an owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that alternative emission factor is more accurate. Furthermore, in accordance with Chapter 62-210.370(2)(d)2., F.A.C., if site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly-applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process. The calculations submitted in this application used a generic emission factor, which is not site-specific to coal handling, but applicable to a number of different types of materials. However, AP-42, Section 11.9, Western Surface Coal Mining, Table 11.9-1, specifies a published PM emission factor directly-applicable to the process for Truck loading is $1.16/(M)^{1.2} = \text{lb/ton}$, where M is the % moisture content. This results in an uncontrolled PM emission factor of 0.12 lb PM/ton assuming a moisture content of 6.5 % given by TECO in their calculations. Using a 90% control efficiency for the use of enclosures and dust suppressants and 6,000,000 tons/yr for the ten transfer points, yields total project emissions of 368 tons/year of PM. In addition, Table 1. Fugitive Dust Emission Factors for Coal-Processing Plants, in A&WMA Air Pollution Engineering Manual, 2nd Edition, Chapter 15, Coal Processing, Table 1 specifies published PM emission factors directly applicable to the process of 0.40 lb/ton for coal railcar unloading, and 0.20 lb/ton for coal transfer and conveying. Using a 90% control efficiency for the use of enclosures and dust suppressants and 6,000,000 tons/yr for the ten transfer points, yields total project emissions of 660 tons/year of PM. Therefore, in light of the fact that there are no emission factors based upon site-specific data such as stack tests and there are no restrictions in TECO's current Title V Permit on the type of coal used, TECO must revise the emissions calculations using one of the published emission factor from AP-42, Section 11.9, Table 11.9-1 or A&WMA Air Pollution Engineering Manual, 2nd Edition, Chapter 15, Coal Processing, Table 1, which are directly-applicable to the process.
4. In the application TECO did not submit an estimate of baseline actual to projected actual emissions as required under Rule 62-212.400(2) F.A.C., in order to determine whether a major modification has occurred. In addition, in accordance with Rule 62-210.200(36)(a), F.A.C states that for an existing electric utility steam generating unit,

baseline actual emission means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding the date a complete permit application is received by the Department. Based on the average 2005 and 2006 coal throughputs submitted by TECO, EPC estimated baseline actual emissions of 291 tons/year for the Solid Fuel Yard (Emission Unit No. 010) using the emission factors from A&WMA Air Pollution Engineering Manual, 2nd Edition, Chapter 15, Coal Processing, Table 1. Since there are no federally enforceable limits on the coal throughput, this modification results in a increase in actual emissions of at least 77 tons/year, which is above the PSD significant net emissions increase of 25 tons/year of PM. Therefore, pursuant to Rule 62-212.300(1)(a), F.A.C. and Rule 62-212.400, F.A.C., TECO shall submit a baseline actual to projected actual applicability test for the modification to the Solid Fuel Yard emission unit, and submit a PSD construction permit application with a BACT analysis for each the emission unit.

Livingston, Sylvania

From: Livingston, Sylvania
Sent: Tuesday, October 21, 2008 3:57 PM
To: 'Karen Sheffield'
Cc: 'bburrows@tecoenergy.com'; 'jward@tecoenergy.com'; 'atnguyen@tecoenergy.com'; 'lcambell@epchc.org'; 'Nasca, Mara'; 'Forney.Kathleen@epa.gov'
Subject: RAI -0570039-041-AC (TECO Big Bend Railcar Unloading Project)
Attachments: EPC Comments on TECO's Railcar Unloading at BB 10-21-08.pdf; 0570039-041-AC_TECOBCTRFI.pdf

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software, *noting that you can view the documents*, and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

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Thank you,

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-0771
sylvia.livingston@dep.state.fl.us



EPC Comments on 0570039-041-AC_T
TECO's Railcar... ECOBBCTRFI.pdf...

Recipient

- Holladay, Cleve
- Arif, Syed
- Gibson, Victoria
- Walker, Elizabeth (AIR)

Read

- Read: 10/21/2008 4:03 PM
- Read: 10/21/2008 4:06 PM

Livingston, Sylvia

From: Livingston, Sylvia
Sent: Tuesday, October 21, 2008 4:00 PM
To: Holladay, Cleve; Arif, Syed
Cc: Gibson, Victoria; Walker, Elizabeth (AIR)
Subject: FW: RAI -0570039-041-AC (TECO Big Bend Railcar Unloading Project)

Attachments: EPC Comments on TECO's Railcar Unloading at BB 10-21-08.pdf; 0570039-041-AC_TECOBBCTRFI.pdf

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-0771 (temp)
GIC 713
sylvia.livingston@dep.state.fl.us

From: Livingston, Sylvia
Sent: Tuesday, October 21, 2008 3:57 PM
To: 'Karen Sheffield'
Cc: 'btburrows@tecoenergy.com'; 'jmward@tecoenergy.com'; 'atnguyen@tecoenergy.com'; 'cambell@epchc.org'; Nasca, Mara; 'Forney.Kathleen@epa.gov'
Subject: RAI -0570039-041-AC (TECO Big Bend Railcar Unloading Project)

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Thank you,

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-0771
sylvia.livingston@dep.state.fl.us



EPC Comments on 0570039-041-AC_T
TECO's Railcar... ECOBBCTRFI.pdf...

Tracking:

Recipient

Read

Livingston, Sylvia

From: Sheffield, Karen A. [kashffield@tecoenergy.com]
Sent: Wednesday, October 22, 2008 10:40 AM
To: Livingston, Sylvia
Cc: Burrows, Byron T.
Subject: RE: RAI -0570039-041-AC (TECO Big Bend Railcar Unloading Project)

I received the attached document.

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Tuesday, October 21, 2008 3:57 PM
To: Sheffield, Karen A.
Cc: Burrows, Byron T.; Ward, Julie M.; Nguyen, Andrew T.; cambell@epchc.org; Nasca, Mara; Forney.Kathleen@epa.gov
Subject: RAI -0570039-041-AC (TECO Big Bend Railcar Unloading Project)

Dear Sir/Madam:

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Thank you,

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-0771
sylvia.livingston@dep.state.fl.us

<<EPC Comments on TECO's Railcar Unloading at BB 10-21-08.pdf>> <<0570039-041-AC_TECOBCTRFI.pdf>>

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.

Livingston, Sylvia

From: Burrows, Byron T. [BTBurrows@tecoenergy.com]
Sent: Tuesday, October 21, 2008 4:17 PM
To: Livingston, Sylvia
Subject: RE: RAI -0570039-041-AC (TECO Big Bend Railcar Unloading Project)

I can view the documents. Thanks.

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]
Sent: Tuesday, October 21, 2008 3:57 PM
To: Sheffield, Karen A.
Cc: Burrows, Byron T.; Ward, Julie M.; Nguyen, Andrew T.; cambell@epchc.org; Nasca, Mara; Forney.Kathleen@epa.gov
Subject: RAI -0570039-041-AC (TECO Big Bend Railcar Unloading Project)

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Thank you,

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-0771
sylvia.livingston@dep.state.fl.us

<<EPC Comments on TECO's Railcar Unloading at BB 10-21-08.pdf>> <<0570039-041-AC_TECOBCTRFI.pdf>>

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Livingston, Sylvia

From: Nasca, Mara
Sent: Tuesday, October 21, 2008 6:29 PM
To: Livingston, Sylvia
Subject: RE: RAI -0570039-041-AC (TECO Big Bend Railcar Unloading Project)

Thanks Sylvia

From: Livingston, Sylvia
Sent: Tuesday, October 21, 2008 3:57 PM
To: 'Karen Sheffield'
Cc: 'btburrows@tecoenergy.com'; 'jmward@tecoenergy.com'; 'atnguyen@tecoenergy.com'; 'cambell@epchc.org'; Nasca, Mara; 'Forney.Kathleen@epa.gov'
Subject: RAI -0570039-041-AC (TECO Big Bend Railcar Unloading Project)

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Thank you,

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-0771
sylvia.livingston@dep.state.fl.us

<< File: EPC Comments on TECO's Railcar Unloading at BB 10-21-08.pdf >> << File: 0570039-041-AC_TECOBCTRFI.pdf >>

Livingston, Sylvia

Subject: FW: Successful Mail Delivery Report

Attachments: Delivery report; Message Headers



Delivery report.txt
(485 B)

Message
Headers.txt (2 KB)

Received: from tlhexsprot2.floridadep.net
(tlhexsprot2.floridadep.net [199.73.152.8])
by mseive01.rtp.epa.gov (Postfix) with ESMTTP id 6447C4451F
for <Forney.Kathleen@epa.gov>; Tue, 21 Oct 2008 15:58:07 -0400 (EDT)
Content-Transfer-Encoding: 7bit
Importance: normal
Priority: normal
Received: from tlhexsmb4.floridadep.net ([172.20.30.47]) by tlhexsprot2.floridadep.net
with Microsoft SMTPSVC(5.0.2195.6713); Tue, 21 Oct 2008 15:57:26 -0400
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1896
Content-class: urn:content-classes:message
Return-Receipt-To: "Livingston, Sylvia" <Sylvia.Livingston@dep.state.fl.us>
MIME-Version: 1.0
Content-Type: multipart/mixed;
boundary="----=_NextPart_001_01C933B7.3C9D7A4C"
Disposition-Notification-To: "Livingston, Sylvia" <Sylvia.Livingston@dep.state.fl.us>
Subject: RAI -0570039-041-AC (TECO Big Bend Railcar Unloading Project)
Date: Tue, 21 Oct 2008 15:57:24 -0400
Message-ID: <864D0E673032DD47ABE8B4EE542DF7CAC71E3B@tlhexsmb4.floridadep.net>
X-MS-Has-Attach: yes
X-MS-TNEF-Correlator:
Thread-Topic: RAI -0570039-041-AC (TECO Big Bend Railcar Unloading Project)
Thread-Index: Ackztz1fsyI+sbQ1StabCOR3OnDJqw==
From: "Livingston, Sylvia" <Sylvia.Livingston@dep.state.fl.us>
To: "Karen Sheffield" <kasheffield@tecoenergy.com>
Cc: <btburrows@tecoenergy.com>,
<jmward@tecoenergy.com>,
<atnguyen@tecoenergy.com>,
<cambell@epchc.org>,
"Nasca, Mara" <Mara.Nasca@dep.state.fl.us>,
<Forney.Kathleen@epa.gov>
X-OriginalArrivalTime: 21 Oct 2008 19:57:26.0073 (UTC) FILETIME=[3D81FA90:01C933B7]

-----Original Message-----

From: Mail Delivery System [mailto:MAILER-DAEMON@mseive01.rtp.epa.gov]
Sent: Tuesday, October 21, 2008 3:59 PM
To: Livingston, Sylvia
Subject: Successful Mail Delivery Report

This is the mail system at host mseive01.rtp.epa.gov.

Your message was successfully delivered to the destination(s) listed below. If the message was delivered to mailbox you will receive no further notifications. Otherwise you may still receive notifications of mail delivery errors from other systems.

The mail system

<Forney.Kathleen@epa.gov>: delivery via 127.0.0.1[127.0.0.1]:10025: 250 OK,
sent 48FE3467_7405_3597_2 B9B6C4454E



RECEIVED

OCT 30 2008

BUREAU OF AIR REGULATION

October 29, 2008

Mr. Syed Arif, P.E.
Florida Department of Environmental Protection
111 South Magnolia Drive, Suite 4
Tallahassee, FL 32301

Via FedEx
Airbill No. 7927 7908 5859

Re: **Request for Additional Information Regarding the Railcar Unloading Project
Big Bend Power Station
File No.: 0570039-041-AC**

Dear Mr. Arif:

This letter serves as a response to the Department's request for additional information (RAI) received October 21, 2008, related to Tampa Electric Company's (TEC) air construction permit application to construct a Railcar Unloading facility at Big Bend Power Station (Railcar Project).

Please find below TEC's clarification of the areas identified by the Department as well as additional process information in order to provide reasonable assurance of the emission analysis and prediction.

Department Request #1

Condition B.5.i.b.ii of Title V permit 0570039~028-AV limits Big Bend Station to a facility wide particulate matter emission limit of 2,767 tons per year, which if relaxed by at least 1 ton per year, will result in a reevaluation of PSD applicability for the facility. Please show that emissions from the new railcar unloading project will not result in exceeding this limit.

TAMPA ELECTRIC COMPANY
P. O. BOX 111 TAMPA, FL 33601-0111

(813) 228-4111

AN EQUAL OPPORTUNITY COMPANY
TAMPAELECTRIC.COM

CUSTOMER SERVICE:
HILLSBOROUGH COUNTY (813) 223-0800
POLK COUNTY (863) 299-0800
ALL OTHER COUNTIES 1 (888) 223-0800

TEC Response #1

As stated in the Department request Big Bend Station is subject to a facility wide particulate matter (PM) emission limit of 2767 tons per year as stated below in the Title V Condition B.5.i.b.ii:

Facility-wide Particulate Matter Emission Limit: In order to provide reasonable assurance that a significant net emission rate increase will not occur as a result of combusting raw and beneficiated coal residual at Big Bend, the combined emissions from Steam Generator Units 1-4 shall not exceed an annual emissions cap of 2,767 tons per year of PM/PM10. This cap corresponds to the average emissions of the years 1999 and 2000. Any relaxation in this limit that increases the facility's potential to emit by at least 1 ton of pollutant per year will result in a reevaluation of PSD applicability for the facility as though construction had not yet commenced at the facility.

Although the referenced facility-wide limit is applicable only to the boilers' (Units 1 through 4) emissions, TEC evaluated the last three years (2005-2007) of PM emissions including boiler, fugitive, and other regulated units emissions. As a conservative approach, TEC used the highest total PM emissions value from 2006 of 1422 tons. The net PM emissions increase from the Railcar Project is estimated to be 2.5 tons. As a result, the maximum potential PM emissions are estimated to be 1424 tons, well below the 2767 ton per year boiler limit. Please see Table 1 for a summary of the results and Attachment 1 for detailed calculations.

Table 1: Summary of Facility Wide TSP/PM10/PM2.5

Year	2005	2006	2007
Total Facility Wide PM Emissions (tons)*	1,219	1,422	1,249
Net total PM increase from the Railcar Project (tons/yr)			2.51
Current Facility Wide PM Emissions(tons/yr) plus PM increase from Railcar Project**			1,424
Facility Wide PM Permit Limit (tons/yr)			2,767
Potential of Permit Limit Exceedance			NO

Notes:

*2005-2007 Total PM emissions are from the annual fee forms

** Calculation used the 2006 PM emission data to represent most restrictive data (1422 tons + 2.51 tons = 1424)

Department Request #2

Please show how much coal has been received annually in the past five years and provide the PM/PM IO emissions from coal unloading for these years. Choose the values from two consecutive years during the five year period and compare them with a maximum coal unloading annual throughput (which could become a permit condition), in order to show there will be no increase in projected emissions which would exceed the PSD significant rates for PM/PM10 .

TEC Response #2

Table 2 summarizes the past five years coal received/transferred and the resultant TSP/PM₁₀/PM_{2.5} emissions for the transfer and conveyor points prior to the coal yard. Since the coal transferred from the railcar will offset the reduction of coal processed through the barge system, the fugitive emissions will not increase from the solid fuel yard and other coal handling emission points.

Table 2: Summary of Baseline/Future Actual Emissions

Years	Coal Transferred (tpy)	TSP (tpy)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
2003	3,973,985	1.280	0.605	0.190
2004	4,244,071	1.367	0.647	0.203
2005	4,433,134	1.428	0.675	0.212
2006	5,052,973	0.655	0.310	0.097
2007	4,688,964	0.608	0.288	0.090

Big Bend Power Station is not subject to an annual coal throughput limit. The intention of the railcar project is not to increase the throughput of coal at Big Bend Power Station. The Future Actual Emissions were calculated assuming that all annual coal throughputs for the station were routed through the railcar system and not through the existing barge unloading system. In reality, coal will be received through both the Railcar Unloading Process and the existing Barge. Comparing the past actual emissions using the data from 2006 and 2007 and the Future Actual emissions in PM emissions, given an annual transfer rate of 8,000,000 tons per year, the net increases of TSP/PM₁₀/PM_{2.5} are 1.439 tons, 0.681 tons, and 0.214 tons (respectively). The increases are below the PSD Significant levels. Table 3 summarizes the PSD Applicability

Analysis from the railcar project. Attachment 1 provides detailed calculations and supporting data.

Table 3: PSD Applicability Analysis

Railcar Unloading Project Big Bend Station

	TSP (tpy)	PM₁₀ (tpy)	PM_{2.5} (tpy)
Baseline Actual Emissions	1.069	0.506	0.159
Future Actual Emissions	2.508	1.186	0.373
Net Emissions Increase	1.439	0.681	0.214
PSD Significant Increase Rate	25	15	15
PSD Review Required?	No	No	No

The third request for additional information made by the Department was to address the comments made by the Environmental Protection Commission of Hillsborough County (EPCHC). Tampa Electric's responses for each request are outlined below.

EPCHC Request #1

In Section III Emission Unit Information, under Subsection B Emission Capacity Information, the maximum process or throughput rate is listed as 4000 tons/hour. Rule 62-210.200(244) "Potential to Emit" FAC. is defined as the maximum capacity of an emission unit or facility to emit under its physical and operational design. Therefore, in order to determine the "Potential to Emit" of the emission unit, please provide the following design information: conveyor belt width, maximum conveyor belt speed, and number of belt plies. In addition, please provide manufacturer's specifications verifying the design information submitted.

TEC Response to EPCHC #1

The design information requested by the EPCHC is given in the Table 4 as follows:

Table 4: Conveyor System Design Specifications

<u>CONVEYORS AND BELT FEEDERS</u>	Width	Speed	Manufacturer	Number of plies
	(in)	(fpm)		
BF-1	96	135	CONTINENTAL	4
C-10	72	650	CONTINENTAL	4
C-11	72	650	CONTINENTAL	4
C-12	72	650	CONTINENTAL	4
C-13	72	650	CONTINENTAL	4
C-14	72	650	CONTINENTAL	4
C-15	72	650	CONTINENTAL	4
C-16	72	650	CONTINENTAL	4

Note that the above information is based on design specifications and TEC has not yet received the final manufacturer's specifications.

EPCHC Request #2

On Drawing No SK-10 of Attachment B of the Application, TECO submitted a process flow diagram, which labels the Track Hopper for the railcar unloading as a "GRIZZLY". Is this a vibrating screen? If so, please provide the following design information in order to determine the emission unit's "Potential

to Emit” as referenced in Equation 19-7 of Perry’s Chemical Engineers’ Handbook, 7th Edition: screen area, through flow rate, unit capacity, open-area factor, slotted-area factor. In addition, please provide manufacturer’s specifications verifying the design information submitted.

TEC Response to EPCHC #2

The equipment labeled “Grizzly” on the process flow diagram submitted by TEC as Attachment B of the application is not a vibrating screen. The grizzly is an 8 inch by 8 inch safety grating designed to allow coal to fall through to the hopper below.

EPCHC Request #3

On Page 2 of Attachment G, TECO submitted PM calculations for the railcar unloading process using factors that were from AP-42, Section 13.2.4, Aggregate Handling and Storage Piles, that resulted in a PM emission factor of 0.00092 (lb PM/ton). The estimated total emissions for this project, based on this emission factor, are 2.8 tons/year of PM. However, Rule 62-210.370(2)(d)1., F.A.C., states that an owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that alternative emission factor is more accurate. Furthermore, in accordance with Chapter 62-210.370(2)(d)2., F.A.C., if site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly-applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process. The calculations submitted in this application used a generic emission factor, which is not site-specific to coal handling, but applicable to a number of different types of materials. However, AP-42, Section 11.9, Western Surface Coal Mining, Table 11.9-1, specifies a published PM emission factor directly-applicable to the process for Truck loading is $1.16/(M)^{1.2}$ =lb/ton, where M is the % moisture content. This results in an uncontrolled PM emission factor of 0.12 lb PM/ton assuming a moisture content of 6.5 % given by TECO in their calculations. Using a 90% control efficiency for the use of enclosures and dust suppressants and 6,000,000 tons/yr for the ten transfer points, yields total project emissions of 368 tons/year of PM. In addition, Table 1. Fugitive Dust Emission Factors for Coal-Processing Plants, in A&WMA Air Pollution Engineering Manual, 2nd Edition, Chapter 15, Coal Processing, Table 1 specifies published PM emission factors directly applicable to the process of 0.40 lb/ton for coal railcar unloading, and 0.20 lb/ton for coal transfer and conveying. Using a 90% control efficiency for the use of enclosures and dust suppressants and 6,000,000 tons/yr for the ten transfer points, yields total project emissions of

660 tons/year of PM. Therefore, in light of the fact that there are no emission factors based upon site-specific data such as stack tests and there are no restrictions in TECO's current Title V Permit on the type of coal used, TECO must revise the emissions calculations using one of the published emission factor from AP-42, Section 11.9, Table 11.9-1 or A&WMA Air Pollution Engineering Manual, 2nd Edition, Chapter 15, Coal Processing, Table 1, which are directly-applicable to the process.

TEC Response to EPCHC #3

TEC's calculation procedure complies with Chapter 62-210.370(2)(d)2, F.A.C. since, as cited by this rule, the calculation is based on "a published emission factor directly applicable to the process for which emissions are computed." Chapter 13 identifies coal as one of the aggregates for which the chapter is intended. In contrast, the factors that EPC proposes are for western surface coal mines. TECO's fuel yard is not a western surface coal mine, therefore EPC's recommended factor is on the lowest tier of applicability and would not comply with 62-210.370(2)(d)2, F.A.C., since Chapter 13 has a factor that is directly applicable to the subject process. Below is a more detailed description of why EPC's proposed factors are not appropriate to use on the subject process.

The table referenced by the EPCHC in the request, *Table 1 Fugitive Dust Emission Factors for Coal-Processing Plants, in A&WMA Air Pollution Engineering Manual, 2nd Edition, Chapter 15, Coal Processing*¹ has an endnote referencing the use of a 1976 EPA document titled *Evaluation of Fugitive Dust Emissions from Mining*² (relevant excerpts in Attachment 2). This document provides discussion regarding the basis of the 0.20 lb/ton emission factor that conflicts with the EPC contention that it is applicable to the Big Bend solid fuel handling system. The points contradicting EPC's position include:

- The document clearly refers to mining operations that transfer and convey coal that has not had the benefit of significant processing as has the coal at Big Bend Station. The additional processing results in significant differences between mined coal and the coal used at Big Bend Station.
- The emission factor was derived from work by a company called ERT by subtracting out the emission factor of the crushing and storage operations at coal mines from the total fugitive emissions of the entire mine operation. The difference is a gross

¹ Wayne T. Davis, ed., *AWMA Air Pollution Engineering Manual*, 2nd Edition, (New York: John Wiley & Sons, 2000), 693-695

² G. Jutze, K. Axetell, and R. Amick, *Evaluation of Fugitive Dust Emissions from Mining*, PEDCo Environmental, Inc., prepared for EPA IERL, ORD, Cincinnati, OH, Contract 6802-1321, Task No. 36, EPA-600/9-76-001, June 1976, 49-51

estimation of the emission rate from all of the conveyor transfer points at a mining facility. As described by the following excerpt from page 51 of the EPA document, “ERT proposed a single emission factor for the combined processing sources at coal mines in northwestern Colorado...” EPC proposes to use this factor for each transfer point in the Big Bend fuel yard. This proposal is not consistent with the source or intent of the factor.

- The authors of this factor acknowledge that the factor is “excessive” in the following quote from page 51 of the EPA document that is its source: “*This seems to be excessive in comparison with estimates for conveying other material, and may be an indication that other unidentified particulate sources are also included in the ERT emission factor for the processing area. The value of 0.20 lb/ton does not account for the relatively high control efficiencies, usually at least 90 percent associated with enclosed transfer and conveying systems.*”
- Authors of the referenced 1976 EPA document have had several updates that have been appropriately incorporated in AP-42 Chapter 11 addressing emissions from western surface coal mines. Therefore, the subject reference in the *Air Pollution Engineering Manual* is outdated. TEC will notify the *Air Pollution Engineering Manual* publisher that Table 1 is misleading as written and needs clarification.

Similarly, EPC cites a railcar unloading emission factor of 0.4 lb/ton from the same source as above, *Table 1* of the previously referenced *A&WMA Air Pollution Engineering Manual, 2nd Edition, Chapter 15, Coal Processing*. The endnote associated with this emission factor references the document titled, *Reasonably Available Control Measures for Fugitive Dust*³ (relevant excerpts in Attachment 2). This document identifies the railcar unloading emission factor as ‘E’ rated, stating on p2-174 that, “*The emission factor for railcar, truck, and conveyor unloading are of unspecified origin; therefore, the reliability should be considered very poor.*” Although this factor is published, the publication does not provide any guidance as to how the factor should be applied, nor does it have any credible basis for use in calculating emissions for this project. In contrast, the emission calculations performed by TEC in the application use empirical equations based on sound engineering principles that are the industry standard. As

³ *Reasonably Available Control Measures for Fugitive Dust*, Ohio EPA, 274-275

noted before, TEC will notify the *Air Pollution Engineering Manual* publisher that Table 1 is misleading as written and needs clarification and correction.

Based on the findings outlined above, the EPC-endorsed emission factors are based on the wrong type of operation and if applied as intended by the authors, would actually result in lower estimated fugitive emissions than TEC currently reports. AP-42 Chapter 13 continues to be the most appropriate estimate of fugitive emissions from Big Bend Station. The 1976 EPA document that is the basis of EPC's preferred factor also addresses fugitive emissions from other industries in the same manner that Chapter 13 does and the EPC source is actually less "coal-specific" than AP-42 Chapter 13. Based on the aforementioned, we assert that TEC is using the best available emission factor based on sound engineering judgment as certified in the application.

EPCHC Request #4

In the application TECO did not submit an estimate of baseline actual to projected actual emissions as required under Rule 62-212.400(2) F.A.C., in order to determine whether a major modification has occurred. In addition, in accordance with Rule 62-210.200(36)(a), F.A.C states that for an existing electric utility steam generating unit, baseline actual emission means the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding the date a complete permit application is received by the Department. Based on the average 2005 and 2006 coal throughputs submitted by TECO, EPC estimated baseline actual emissions of 291 tons/year for the Solid Fuel Yard (Emission Unit No. 010) using the emission factors from A&WMA Air Pollution Engineering Manual, 2nd Edition, Chapter 15, Coal Processing, Table 1. Since there are no federally enforceable limits on the coal throughput, this modification results in a increase in actual emissions of at least 77 tons/year, which is above the PSD significant net emissions increase of 25 tons/year of PM. Therefore, pursuant to Rule 62-212.300(1)(a), F.A.C. and Rule 62-212.400, F.A.C., TECO shall submit a baseline actual to projected actual applicability test for the modification to the Solid Fuel Yard emission unit, and submit a PSD construction permit application with a BACT analysis for each the emission unit.

TEC Response to EPCHC #4

TEC continues to assert that the best available emission factor is being used based on sound engineering evaluation and judgment as certified in the application. Based on this assertion, the installation of the Railcar would not warrant an estimate of the baseline actual to projected actual emissions. The Big Bend

Power Station Railcar Project is not subject to the requirements of Rule 62-212.400(2) F.A.C. due to the fact that the project is not a major modification and is not subject to PSD review.

Since the coal processed from the railcar system will offset the coal processed through the barge system, the fugitive emissions from the solid fuel yard and other coal handling emission points will not increase significantly as a result of the railcar project. Table 4 below summarizes the requested information.

Table 5: Baseline Actual to Projected Actual PM Emissions

	Coal Transferred Tons/year	Total Tons/year
Avg. Year 2006 & 2007	4,870,968	1.07
Projected Actual	4,870,968	1.53
Net Increase		0.46

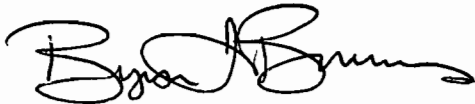
The net increase is below the PSD Significant Level of 25 tons and thus is not subjected to PSD Review.

October 29, 2008
Page 11 of 11

This response and associated calculations have been certified by a Florida professional engineer in the attached certification statement. TEC continues to look forward to resolving any questions the Department has and appreciates the Departments' efforts in expediently processing this permit application.

If you have any questions, please contact me at (813) 228-1282.

Sincerely,

A handwritten signature in black ink, appearing to read "Byron T. Burrows". The signature is fluid and cursive, with a long horizontal stroke at the end.

Byron T. Burrows, P.E.
Manager - Air Programs
Environmental, Health & Safety

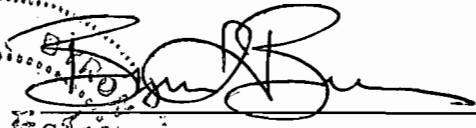
C/enc: Mara. Nasca (FDEP – SW)
Jerry Campbell (EPCHC)

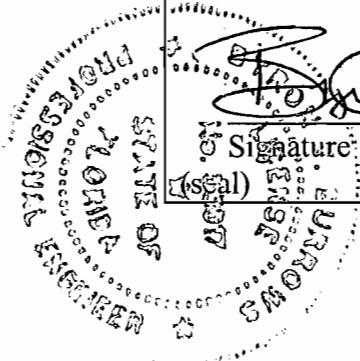
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**TAMPA ELECTRIC COMPANY
BIG BEND STATION**

**RAILCAR UNLOADING AND CONVEYANCE SYSTEM
RESPONSE TO FDEP REQUEST FOR ADDITIONAL INFORMATION**

Professional Engineer Certification

1. Professional Engineer Name: Byron T. Burrows, PE Registration Number: 53817	
2. Professional Engineer Mailing Address... Organization/Firm: Tampa Electric Company Street Address: PO Box 111 City: Tampa State: FL Zip Code: 33601	
3. Professional Engineer Telephone Numbers... Telephone: (813) 228 - 1282 Fax: (813) 228 - 1308	
4. Professional Engineer E-mail Address: btburrows@tecoenergy.com	
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify that:</i> <i>(1) To the best of my knowledge, the information presented in the Tampa Electric Company (TEC) response to the Departments' October 21, 2008 request for additional information regarding the Big Bend Station railcar unloading project are true, accurate, and complete based on my review of material provided by TEC engineering and environmental staff; and</i> <i>(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 certification.</i>	
 Signature	<u>10/28/08</u> Date



**ACTUAL COAL USAGE AND METEOROLOGICAL DATA SUMMARY
BIG BEND STATION**

Year	2003	2004	2005	2006*	2007*
Coal Throughput (tons)	3,973,985	4,244,071	4,433,134	5,052,973	4,688,964
Moisture Content, %	6.5	6.5	6.5	10.2	9.9
Mean Wind Speed, mph, annual	8.6	8.6	8.6	6.9	6.9

*Years used for Potential Emissions Calculations

Notes:

Moisture content and wind speed are actual annual average as reported in the Annual Operating Reports

Baseline Actual Emissions

$$E = k \times 0.0032 \times \left[\frac{(U / 5)^{1.3}}{(M / 2)^{1.4}} \right] \times TR \times [(1 - (CE / 100))] \times (1 \text{ ton} / 2,000 \text{ lb})$$

- E* = TSP/PM₁₀/PM_{2.5} emission rate; tons per year (tpy)
- k = particle size multiplier; dimensionless
- U = mean wind speed, miles per hour (mph)
- M = fuel moisture content; weight percent (%)
- TR = transfer rate; tons per year (tpy)
- CE** = control efficiency; 90 percent (%)

*Source: Section 13.2.4.3, Eqn. (1), AP-42, November 2006.

**Source: Section 13.2.4.4, AP-42, November 2006.

Data	
k (TSP)	0.74
k (PM ₁₀)	0.35
k (PM _{2.5})	0.11
U	7.92 mph
M	7.92 %
TR	4870968.18 tpy

Transfer Point	Emission Point ID	Control Efficiency (%)	Maximum Throughput (tph)	Throughput (tpy)	Emissions		
					TSP (tpy)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
Barge Clamshell to Conveyor D1	FH-001	90	4,000	4,870,968	0.153	0.072	0.023
Barge Bucket Elevator to Conveyor A1	FH-002	90	4,000	4,870,968	0.153	0.072	0.023
Conveyor A1 to Conveyor B1	FH-003	90	4,000	4,870,968	0.153	0.072	0.023
Conveyor B1 to Conveyor D1	FH-004	90	4,000	4,870,968	0.153	0.072	0.023
Self-Unloading Barge to Conveyor D1	FH-005	90	4,000	4,870,968	0.153	0.072	0.023
Conveyor D1 to Conveyor E1	FH-006	90	4,000	4,870,968	0.153	0.072	0.023
Conveyor E1 to Conveyor Y or F1	FH-007	90	4,000	4,870,968	0.153	0.072	0.023
Totals					1.069	0.506	0.159

Notes:

Values for U & M for the equation are the averages data from plant weather station referenced in TABLE 2-1

New emission points are referenced in Flow Diagram (Drawing SK-10) submitted in AC Application

Future Projected Emissions

$$E = k \times 0.0032 \times \left[\frac{(U / 5)^{1.3}}{(M / 2)^{1.4}} \right] \times TR \times [(1 - (CE / 100))] \times (1 \text{ ton} / 2,000 \text{ lb})$$

E* = TSP/PM₁₀/PM_{2.5} emission rate; tons per year (tpy)
 k = particle size multiplier; dimensionless
 U = mean wind speed, miles per hour (mph)
 M = fuel moisture content; weight percent (%)
 TR = transfer rate; tons per year (tpy)
 CE** = control efficiency; 90 percent (%)

*Source: Section 13.2.4.3, Eqn. (1), AP-42, November 2006.

**Source: Section 13.2.4.4, AP-42, November 2006.

2007 Data	
k (PM)	0.74
k (PM ₁₀)	0.35
k (PM _{2.5})	0.11
U	7.92 mph
M	7.92 %
TR	8,000,000 tpy

Transfer Point	Emission Point ID	Control Efficiency (%)	Maximum Throughput (tph)	Throughput (tpy)	Emissions		
					TSP (tpy)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
Train Car Drop Unloading to Track Hopper	New	90	4,000	8,000,000	0.251	0.119	0.037
Drop to Belt Feeder BF-1	New	90	4,000	8,000,000	0.251	0.119	0.037
Transfer from BF-1 to C-1	New	90	4,000	8,000,000	0.251	0.119	0.037
Conveyor Transfer Point T-10	New	90	4,000	8,000,000	0.251	0.119	0.037
Conveyor Transfer Point T-11	New	90	4,000	8,000,000	0.251	0.119	0.037
Conveyor Transfer Point T-12	New	90	4,000	8,000,000	0.251	0.119	0.037
Conveyor Transfer Point T-13	New	90	4,000	8,000,000	0.251	0.119	0.037
Conveyor Transfer Point T-14	New	90	4,000	8,000,000	0.251	0.119	0.037
Conveyor Transfer Point T-15	New	90	4,000	8,000,000	0.251	0.119	0.037
Conveyor Transfer Point T-16	New	90	4,000	8,000,000	0.251	0.119	0.037
Totals					2.508	1.186	0.373

Notes:

Values for U & M for the equation are the averages data from plant weather station referenced in TABLE 2-1
 New emission points are referenced in Flow Diagram (Drawing SK-10) submitted in AC Application

Resource 1

AWMA Air Pollution Engineering Manual, 2nd Edition

Wayne T. Davis, ed.

(New York: John Wiley & Sons, 2000)

Pages 693-695

ded by a rising column of the gases. The dryer at an overflow weir. A flash second most popular type of dryer. In generated in the combustion furnace as an excellent drying environment. For extremely fine coal, with the top

ing, mines using unit-train shipment of coal to fill a train. Silos are often thermore, silo storage prevents the and exposure to wind. Some mines ing conveyors for loading. At other ges are loaded directly as the coal is

MINERALIZATION

Factors for coal-processing-plant summarized in Table 1, and fugitive emissions in the following paragraphs.

Source in the fine or coarse coal air exhaust from the air separation or the dry cleaning process, these when the coal is stratified by pulses of emissions from this source are normally followed by fabric filters. Potential fugitive processes are very low.⁴³ Emissions from the final preparation air exhaust. This emission stream is entrained in the drying gases and VOC released from the coal, in products of coal combustion resulting from the hot gases [including carbon dioxide (CO₂), VOC, sulfur dioxide (SO₂), and NO_x]. Table 2 shows emission factor. Emission factors for SO₂, NO_x, and VOC are listed in Table 3.⁴³

Table 1. Fugitive Dust Emission Factors for Coal-Processing Plants

Unloading	
Truck	0.02 lb/ton unloaded ^a
Railcar	0.40 lb/ton unloaded ^b
Primary crushing	0.02 lb/ton crushed ^c
Secondary crushing/screening	0.16 lb/ton crushed/screened ^c
Transfer and conveying	0.20 lb/ton transferred or conveyed ^d
Cleaning	Negligible ^e
Storage	
Loading onto pile	0.08 lb/ton loaded ^f
Vehicular traffic	0.16 lb/ton stored ^f
Loading out	0.10 lb/ton stored ^f
Wind erosion	0.09 lb/ton stored ^f
Loading	
Truck	0.02 lb/ton loaded ^a
Railcar	0.40 lb/ton loaded ^b
Barge	0.40 lb/ton loaded ^b

^aRef. 16.

^bRef. 17 and 18.

^cRef. 19.

^dRef. 20.

^eRef. 21 (see Table 2 for dryer emissions).

^fRef. 22.

A number of inorganic hazardous air pollutants are found in trace quantities in coal. These include arsenic, beryllium, cadmium, chromium, copper, mercury, manganese, nickel, lead, thorium, and uranium. It is likely that many of these are emitted in trace amounts from crushing, grinding, and drying operations.⁴³

The new source performance standards (NSPS) for coal preparation plants were promulgated in January 1976 (40 CFR Subpart Y). These standards specify emission limits for PM from coal cleaning thermal dryers and pneumatic cleaning equipment sources, and opacity limits for fugitive emissions from coal processing and conveying equipment, coal storage systems, and coal transfer and loading systems.

AIR POLLUTION CONTROL MEASURES

This section presents the fugitive dust control methods that may be used on a case-by-case basis by the coal-processing industry followed by a discussion of control technologies used in the processing phase.^{17,22} Application of fugitive dust control measures would be to meet the National Ambient Air Quality Standards or to reduce the nuisance potential beyond the property line of the coal-processing facility.

Table 2. PM Emission Factors for Coal Cleaning^a Emission Factor Rating: D (Except as Noted)

Process	Filterable PM ^b			Condensable PM ^c	
	PM	PM _{2.5}	PM _{1.0}	Inorganic	Organic
Multilouvered dryer ^d (SCC 3-05-010-03)	3.7	ND	ND	0.057	0.018
Fluidized bed dryer ^e (SCC 3-05-010-01)	26 ^f	3.8 ^f	1.1 ^f	0.034 ^h	0.0075 ^h
Fluidized bed dryer with venturi scrubber ^j (SCC 3-05-010-01)	0.17	ND	ND	0.043	0.0048
Fluidized bed dryer with venturi scrubber and tray scrubber ^k (SCC 3-05-010-01)	0.025	ND	ND	ND	ND
Air tables with fabric filter ^m (SCC 3-05-010-13)	0.032 ⁿ	ND	ND	0.033 ^p	0.0026 ^q

^aEmission factor units are lb/ton of coal feed, unless noted. 1 lb/ton = 2 kg/Mg. SCC, Source Classification Code; ND, no data. Table taken from AP-42, Chapter 11.10, "Coal Processing."

^bFilterable PM is that PM collected on or prior to the filter of an EPA Method 5 (or equivalent) sampling train.

^cCondensable PM is that PM collected in the impinger portion of a PM sampling train.

^dRef. 35. Alternate SCC is 3-05-310-03, which corresponds to units of lb/thousand tons of coal feed. To determine the emission factor for this alternate SCC, multiply the factor in this table by 1,000.

^eAlternate SCC is 3-05-310-01, which corresponds to units of lb/thousand tons of coal feed. To determine the emission factor for this alternate SCC, multiply the factor in this table by 1,000.

^fRefs. 36, 38.

^gRefs. 36, 38. Emission factor rating: E. Particle size data from Ref. 38 used in conjunction with filterable PM data from Refs. 36 and 38. Actual cut size of PM_{2.5} data was 2.7 μm.

^hRef. 36.

ⁱRefs. 27, 28, 36, 38, 41. See footnote e for alternate SCC.

^jRef. 42. Tray scrubber using NaOH as the scrubbing liquid. See footnote e above for alternate SCC.

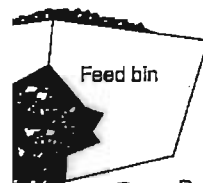
^kAlternate SCC is 3-05-310-13, which corresponds to units of lb/thousand tons of coal feed. To determine the emission factor for this alternate SCC, multiply the factor in this table by 1,000.

^lRefs. 39, 40.

^mRef. 40.

ⁿRef. 39.

For fugitive dust emissions from conveying operations, the control methods generally used are partial (top) enclosure, total enclosure, or wet suppression. Also, fugitive dust emissions created by the droppings from the return belt conveyors may



Control Alternatives and Their Control

Control Alternatives	CE ^a (%)
closure, vent to fabric filter	99
closure	70
at suppression with chemicals	80
atering	50
closure vent to fabric filter	99
closure	70
at suppression with chemicals	80
atering	50
closure, vent to fabric filter	99
at suppression with chemicals	90
closure, vent to fabric filter	99
at suppression with chemicals	90
closure of conveyors and transfer points, vent to fabric filter	99
closure of conveyors and transfer points	70
at suppression with chemicals	90
closure	100
closure	80
lescopic chutes	75
at suppression with chemicals	75
nd guards	50
closure	100
at suppression with chemicals	99
der-pile conveyor	80
at suppression with chemicals	95
cket wheel reclaimers	80
at suppression with chemicals	80
lescopic chutes	75
at suppression with chemicals	80
lescopic chutes	75

and 22.

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Resource 2

Evaluation of Fugitive Dust Emissions from Mining

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PEDCo Environmental, Inc., prepared for EPA IERL, ORD
Cincinnati, OH

Contract 6802-1321, Task No. 36, EPA-600/9-76-001

June 1976

Pages 49-51

Note: This is a reference cited in AP 42, *Compilation of Air Pollutant Emission Factors, Volume I Stationary Point and Area Sources*. AP42 is located on the EPA web site at www.epa.gov/ttn/chief/ap42/

The file name refers to the reference number, the AP42 chapter and section. The file name "ref02_c01s02.pdf" would mean the reference is from AP42 chapter 1 section 2. The reference may be from a previous version of the section and no longer cited. The primary source should always be checked.

G. Jutze, K. Axetell, and R. Amick, *Evaluation of Fugitive Dust Emissions from Mining*, PEDCo Environmental, Inc., prepared for EPA IERL, ORD, Cincinnati, OH, Contract 6802-1321, Task No. 36, EPA-600/9-76-001, June 1976, PP. 49-51

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Evaluation of Fugitive Dust Emissions from Mining

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Prepared for:

Industrial Environmental Research Lab -Cincinnati, OH Resource Extraction
and Handling Div

Apr 76

or to deliver the processed material to the consumer, conveying is most often found within the processing area--moving the crushed material to storage, a cleaning process, or the train loading station. This operation also includes the loading of train cars and other transfer of the material, except for conveyors within the crushing or storage operations which are considered to be integral to these operations. Because of the large tonnages that must be moved in mining, most of the transport systems are belt conveyors rather than screw, vibrating, or continuous-flow conveyors.

Generally, conveyor runs between processes are less than 1,000 ft. The average length of the few haulage conveyors between pits and crushers is about 2,100 ft,²² and off-site delivery conveyors of up to 12 mi have been built for coal.

Loss of material from the conveyors is primarily at the feeding, transfer, and discharge points and occurs due to spillage or windage. A conveyor belt is shown in Figure 3.7. The total weight loss in transit is certainly greater than the fugitive dust emissions from this operation since much of the spillage is deposited along the conveyor and some of the windblown material is in the settleable size range.

Excessive moisture in the material or air currents can create discharge problems on belt conveyors. Therefore, most are enclosed, and in some cases the transfer points may be hooded and vented to a dust collector. Both the enclosure and the hooding greatly reduce fugitive dust emissions from this operation.

Emission Estimate

Conveying is one of the most variable mining operations with respect to fugitive dust emission rates. In many

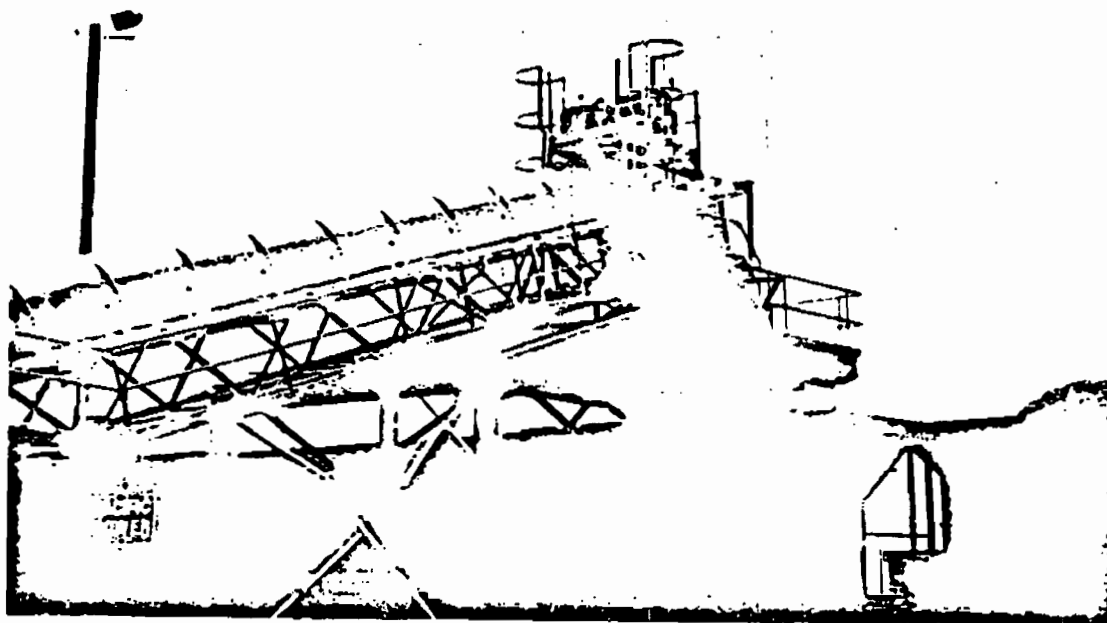


Figure 3.7. Transfer and conveying.

mines, there are no belt conveyors or similar transfer processes; the material is moved by truck to the tippie and loaded directly onto trains. At other mines, extensive networks of unenclosed conveyors are used, such as with bucket wheel excavators. Also, the emissions from conveying different materials vary greatly, depending in part on size distribution and moisture content.

ERT proposed a single emission factor for the combined processing sources at coal mines in northwestern Colorado-- 0.44 lb/ton (0.044 percent of material processed with half of these emissions fugitive dust). The processing sources at these mines were identified as transfer and conveying, crushing, and storage. Since other emission estimates are available specifically for the crushing and storage operations at coal mines, a value for conveying can be determined by subtraction from the overall ERT emission factor. Using the higher of alternative emission estimates for crushing and storage of 0.18 lb/ton and 0.054 lb/ton, respectively, the indicated emission rate for conveying would be 0.20 lb/ton. This seems to be excessive in comparison with estimates for conveying other material, and may be an indication that other unidentified particulate sources are also included in the ERT emission factor for the processing area. The value of 0.20 lb/ton does not account for the relatively high control efficiencies, usually at least 90 percent, associated with enclosed transfer and conveying systems.

The Hittman report stated that coal conveyor systems "are either covered or operated at such a speed that dusting does not occur to any great extent." Also, it was pointed out that only a small proportion of coal transport is done by this method. However, the same report used a value of 0.04 percent, or 0.8 lb/ton, loss through spillage at conveyor transfer points. Even if only a few percent of the

Resource 3

Reasonably Available Control Measures for Fugitive Dust

Ohio EPA

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A typical power plant has a generating capacity of about 500 MW, equivalent to consumption of roughly 230 tons of bituminous coal per hour.

Fugitive dust may be emitted from several sources in the coal-fired power plant cycle. At the mine, potential sources include overburden removal, coal extraction, stockpiles, conveying, loading and hauling. At the power plant site, possible sources include coal unloading, stockpiling, coal handling and transfer, and dry ash handling and disposal. Coal preparation plants at either the mine or power plant site can be sources of fugitive emission generation at crushing, sizing and handling operations.

2.4.2 Fugitive Dust Emission Factors

The estimated emission factors for fugitive emissions from coal-fired power plants are summarized in Table 2.4-1.

The emission factors for coal mining and processing sources were excluded since these are addressed in Sections 2.1.4 and 2.19.

The emission factors for rail car, truck and conveyor unloading are of unspecified origin; therefore, the reliability should be considered as very poor. The emission factor for barge unloading is based upon limited testing and field observations. Its reliability should be considered as fair. The coal storage and the transfer and conveying emission factors are discussed in Section 2.2.1.

The emission factor for fly ash handling and disposal is described by the source as an engineering estimate without

TABLE 2.4-1. FUGITIVE DUST EMISSION FACTORS FOR COAL-FIRED POWER PLANTS

Source	Emission factor	Reliability rating	Reference
① Coal delivery			
Railcar unloading	0.4 lb/ton unloaded	E	1
Barge delivery	0.046 lb/ton unloaded	C	2
Truck unloading	0.4 lb/ton unloaded	E	1
Conveyors	0.04 to 1.0 lb/ton unloaded	E	1,2
② Coal storage			
Loading onto pile	0.08 lb/ton coal loaded	D	3
Vehicular traffic	0.16 lb/ton coal stored	D	3
Loading out	0.10 lb/ton coal loaded out	D	3
Wind erosion	0.09 lb/ton coal stored	D	3
③ Transfer and conveying	0.04 to 1.0 lb/ton coal handled	E	1,2,4
④ Fly ash handling and disposal	20 to 100 lb/ton ash handled	E	5