



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/PM_{10} 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/PM_{10} .
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)

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 $1.16/(M)^{1.2}$ =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, Sylvia

From: Livingston, Sylvia
Sent: Tuesday, October 21, 2008 3:57 PM
To: 'Karen Sheffield'
Cc: 'burrows@tecoenergy.com'; 'jward@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)
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).

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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_TECOBCTRFI.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. [kasheffield@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)

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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.

10/22/2008

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

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10/21/2008

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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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_TECOBCTRFl.pdf >>

Livingston, Sylvania

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 ESMTP 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, Sylvania" <Sylvia.Livingston@dep.state.fl.us>
MIME-Version: 1.0
Content-Type: multipart/mixed;
 boundary="----=_NextPart_001_01C933B7.3C9D7A4C"
Disposition-Notification-To: "Livingston, Sylvania" <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, Sylvania" <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, Sylvania
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