# Walting on P.E. SEAL

### Scearce, Lynn

From:

Scearce, Lynn

Sent:

Monday, August 22, 2011 2:29 PM

To:

Heron, Teresa

Subject:

FW: An application was transferred in EPSAP on FDEP-0570039-049-AC/050-AV

Teresa, You have been assigned this project No. 0570039-049-AC/050-AV.

Lynn

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

From: EPSAP@dbprod.dep.state.fl.us [mailto:EPSAP@dbprod.dep.state.fl.us]

Sent: Monday, August 22, 2011 9:50 AM

To: Koerner, Jeff; Walker, Elizabeth (AIR); Linero, Alvaro; DeAngelo, Gregory; Arif, Syed; Holtom,

Jonathan; Scearce, Lynn; Friday, Barbara

Subject: An application was transferred in EPSAP on FDEP

An application was transferred to your office in EPSAP for the following facility:

Application Number: 2982

Facility ID: 0570039

Facility Name: TAMPA ELECTRIC COMPANY

At your earliest convenience, please log-in to the EPSAP application located at <a href="http://appprod.dep.state.fl.us/epsap\_eng/default.asp">http://appprod.dep.state.fl.us/epsap\_eng/default.asp</a> to begin the application review process.

ermitting Application - Permit C	Detail and Log Permit 🚟			
POINTS AIRS ID	0570039 STAT	ARMS Facility US A OFFICE	SWII SW: HILLSB	OROUGH
SITE NAME BIG BEND STATION		331-3	COUNTY HILLSBORO	
OWNER/COMPANY TAMPA ELECTRIC COMPANY				25. 82451 <b>2</b> . 15
AIR Permit#	[X3] - [X3]	Project # 049	CRA Refe	rence#
Permit Office TAL (HEADOUA	(RTERS)	Agi	ency Action Pending	00C A
Project Name BIG BEND STAT	ION	Desc Revise Testing conditions (unit 1 and 2)		
Type/Sub/Des AC / M1	Minor Modification			Logged 08/22/2011
Received 08/19/2011	Issued	Expires	Application Act	ion MODIFICATION
Fee 0.00	Fee Recd	Dele	Overri	de TITLE V
		Related Party		
Role APPLICANT		Begin 08/22/2011		End
Name BISHOP, RON			ompany TAMPA ELECTR	IC COMPANY S
Address P.O. BOX 111	<u> </u>	1 5		
City TAMPA		State FL	Zip 33601 - 0111	Country U.S.A.
Phone 813-228-4111	Fax 813-630-7121			
Processor HERON_T	Ϋ́	Processors Active 08/22/2011	S Inactive	Events



RECEIVED

AUG 15 2011

DIVISION OF AIR RESOURCE MANAGEMENT

August 12, 2011

Jeffery F. Koerner, Program Administrator Florida Department of Environmental Protection Division of Air Resource Management Office of Air Permitting and Compliance 2600 Blair Stone Road, M.S. 5505 Tallahassee, Florida 32399-2400 Via FedEx Airbill No. 7974 0820 0889

Re: Tampa Electric Company - Big Bend Station Title V Permit Number 0570039-045-AV SCCT Permit Limit Correction (EUs-041,-042)

Dear Mr. Koerner:

This correspondence requests an administrative correction to permit no. 0570039-045-AV pursuant to Rule 62-210.360 F.A.C. A recent review of the permit shows discrepancies between the permitted NO<sub>x</sub> and 40 CFR 63 Subpart KKKK, Standards of Performance for Stationary Combustion Turbines. A discrepancy is also noted between the permitted CO limit and original permit application/vendor supplied data.

Subpart KKKK and permit application reports the NO<sub>x</sub> limits (natural gas and fuel oil) to 2 significant figures (e.g. 25 ppm). The permit application also reports the CO limits (natural gas and fuel oil) to 2 significant figures (e.g. 42 ppm). In contrast, the current permit reports NO<sub>x</sub> limit (e.g. 25.0 ppm) and CO limit (42.0 ppm) to 3 significant figures. This discrepancy is significant, because it unnecessarily imposes a higher degree of precision. Therefore, the Title V permit limits should be appropriately rounded to match the federal and permit application limits. A summary of the discrepancies is shown in <u>Table 1</u>.

Table 1 - Summary of Subpart KKKK/SIP and Permitted Limits.

Parameter	SIP/Federal Threshold	Reference	Permitted Threshold	Reference
NO <sub>x</sub>	25 ppmdv @15% O <sub>2</sub>	Subpart KKKK	25.0 ppmdv @15% O <sub>2</sub>	Condition O.8a(1)
	42 ppmdv @15% O <sub>2</sub>	Subpart KKKK	42.0 ppmdv @15% O <sub>2</sub>	Condition O.8b(1)
	74 ppmdv @15% O <sub>2</sub>	Subpart KKKK	74.0 ppmdv @15% O <sub>2</sub>	Condition O.8b(2)
	32 lb/hr	AC application	32.0 lb/hr	Condition O.8a(2)
	51 lb/hr	AC application	51.3 lb/hr	Condition O.8b(3)
СО	21 ppmdv @15% O <sub>2</sub>	AC application	21.0 ppmdv @15% O <sub>2</sub>	Condition O.9a(1)

Mr. Jeffery F. Koerner August 12, 2011 Page 2 of 2

EPA has published documentation in support of the proposed corrections. EPA (2009)<sup>1</sup> published documentation on the rounding and significant figures for emissions reporting. For example, if the emission standard is 90, 90.357 would be rounded to 90, 90.639 would be rounded to 91, 90.500 would be rounded down to 90 since 90 is even, and 91.500 would be rounded to up to 92 since 91 is odd. EPA (1990)<sup>2</sup> also indicates a permit limit of 2 significant figures should be reported to 2 significant figures.

TEC requests the permit limits be revised in Condition O.7 and O.8 in Section III, Subpart O pursuant to Rule 62-210.360 F.A.C. The proposed additions are shown in highlighted italics, while deletions are shown as strikethrough as follows:

- O.7. Nitrogen Oxide (NO<sub>X</sub>). NO<sub>X</sub> emissions from each unit shall not exceed the following:
  - a. When Firing Natural Gas.
    - (1) 25 25.0 ppmvd @ 15% oxygen (O<sub>2</sub>) (NSPS) or,
    - (2) 32 32.0 lb/hr/SCCT (SIP).
  - b. When Firing Ultra Low Sulfur Diesel.
    - (1) 4242.0 ppmvd @ 15% O<sub>2</sub> (SIP) or,
    - (2) 74 74.0 ppmvd @ 15% O<sub>2</sub> (NSPS) or,
    - (3) 51 51.3 lb/hr/SSCT (SIP).
- **O.8.** Carbon Monoxide (CO). CO emissions from each unit shall not exceed the following:
  - a. When Firing Natural Gas.
    - (1) 2121.0 ppmvd @ 15% O<sub>2</sub> (SIP) or,
    - (2) 9.1 lb/hr/SCCT (SIP).
  - b. When Firing Ultra Low Sulfur Diesel.
    - (1) 5.1 ppmvd @ 15% O<sub>2</sub> (SIP) or,
    - (2) 2.1 lb/hr/SCCT (SIP).

Please contact me at (813) 228-4232 or Byron Burrows at (813) 228-1282, if you have any questions regarding this request.

Sincerely.

Robert A. Velasco, P.E., BCEE, QEP

Air Programs

Environmental, Health & Safety

EHS/rlk/RAV107

cc: Cindy Zhang-Torres, DEP SW District

Diana Lee, EPCHC

<sup>&</sup>lt;sup>1</sup> EPA Office of Enforcement and Compliance Assurance (2009). Memorandum: Issuance of the Clean Air Act National Stack Testing Guidance. Washington, DC: U.S. Government Printing Office.

<sup>&</sup>lt;sup>2</sup> EPA Office of Air Quality Planning Standards (1990). Memorandum: Performance Test Calculation Guidelines. Research Triangle Park, North Carolina: U.S. Government Printing Office



### RECEIVED

AUG 23 2011

DIVISION OF AIK RESOURCE MANAGEMEN

August 22, 2001

Jeffery F. Koerner, Program Administrator Florida Department of Environmental Protection Division of Air Resource Management Office of Air Permitting and Compliance 2600 Blair Stone Road, M.S. 5505 Tallahassee, Florida 32399-2400 Via FedEx Airbill No. 7974 3503 2183

Re:

Tampa Electric Company - Big Bend Station

Application to Revise Test Conditions (EUs -001-002 -029 -030)

Permit application No. 2982-1

Facility ID No. 0570039

Dear Mr. Koerner:

Tampa Electric Company (TEC) is submitting the PE certification page pursuant to the requirements of Electronic Permit Submittal Application Process (EPSAP) air permit application No. 2982-1 and Rule 61G15-23.003, F.A.C.

Please contact me at (813) 228-4232 or Byron Burrows at (813) 228-1282, if you have any questions regarding the air permit application.

Sincerely,

Robert A. Velasco, P.E., BCEE, QEP

Air Programs

Environmental, Health & Safety

Tampa Electric Company

EHS/rlk/RAV109

Enclosure

0

c/enc: Diana Lee, SW District

lee@epchc.org

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

(813) 228-4111

## 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:** 2982-1 **Facility Identification Number:** 0570039

Facility Owner/Company Name: TAMPA ELECTRIC COMPANY

AUG 23 2011

BUREAU OF AIR REGULATION

#### **Purpose of Application:**

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

Signature File Created: 8/18/2011 5:35:27 PM

File Description	Authentication Code		
Submitted Application Data	6FE56A801A4A257948E9F63961A8787318BC71D6		
Uplo	aded Facility Documents:		
Application Letter and backup.pdf	A17FDC9FC6CA5C91B1DF8199C6627906C4690111		
Unit 1 _ 2 Process Flow Diagram.pd	f 12C8659A68ED6E94077556EA005C35E390DA8CD8		
This Application Has	No Uploaded Emissions Unit Documents.		
Final Signature File	2B633D89387D11700F50F0F8EC24AD27EC7F7AA		

Professional Engineer (PE): ROBERT VELASCO License No: 57190

(sign and affix PE seal below)

No 57190

No 57190

ORIO PRINTING

PE Signature

**Date** 

### Application No 2982-1: Revise Test Conditions (EUs -001-002 -029 -030)

**Professional Engineer Statement:** 

- (1) Engineering opinion and information included herein provides reasonable assurance of meeting the requirements of the letter of authorizations 0570039-046-AC and 0570039-048-AC; Title V permit and Rule 62-297(7)(c) F.A.C.;
- (2) Air Construction Permit/Title V permit correction is based on information best available information at the time and is believed to be correct to the best of the Engineer's knowledge:
- (3)Emission information is based on acceptable testing methods and techniques available for estimating or calculating emissions from materials, information and calculations contained in this certification; and
- (4) Seal does not certify or attest to the accuracy of work or information prepared by others who are qualified to perform such services. This includes, but not limited to drawings, specifications, correspondences, personnel communication etc.