



TAMPA ELECTRIC

April 25, 2011

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BUREAU OF
AIR REGULATION

Mr. Jon Holtom, P.E., CPM
Title V Program Administrator
Bureau of Air Regulation
Florida Department of Environmental Protection
111 South Magnolia Avenue, Suite 4
Tallahassee, Florida 32301

Via FedEx
Air Bill No. 7946 8702 4936

**Re: Tampa Electric Company - Big Bend Station
Title V Permit Number 0570039-045-AV
Big Bend FGD Gypsum Fines Filter Project
Notification of Change without Permit Revision
Request for Additional Information No. 1**

Dear Mr. Holtom:

Tampa Electric submitted a letter, dated April 22, 2011, to the Florida Department of Environment Protection (the Department) requesting a notification of change without permit revision. The initial request did not include any calculations since gypsum handling is an unregulated source of emissions and the proposed modification is considered an insignificant source of emissions.

On April 22, 2011, the Department contacted TEC requesting calculations to demonstrate the proposed modification does not exceed the 5 tons per year threshold. In response to the request, TEC has prepared this response and supporting documentation pursuant to the Department's request. The response has been prepared in accordance with the revised Title V permit 0570039-045-AV.

As documented in April 21, 2010 request, the existing gypsum fines are currently dewatered with plate and frame press then loaded directly into trucks and transported off-site. The proposed dewatering modifications will dewater the fines using new horizontal belt filter presses (HBF). The byproduct will be conveyed to a covered bunker and loaded directly into the trucks using front end loaders. Thus, the proposed modification will require an additional loading step not currently utilized at the facility.

TAMPA ELECTRIC COMPANY
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TEC has prepared emission calculations in accordance with the AP 42, Miscellaneous Sources. The calculation shows the annual emissions were estimated to be approximately 6.0 pounds per year due the proposed handling modification. This contribution is substantially below the 5 tons per year threshold in accordance with Rule 62-213.430(6) and 62-210.300(3), F.A.C. A summary of the calculations is shown attached.

Again, TEC believes this notification fulfills the requirements under 62-213.410(2), F.A.C. and is exempt from the permitting requirements under 62-213.430(6)(b)3, F.A.C. and 62-210.300(3)(b)1, F.A.C. Please contact me at (813) 228-4232 or Byron Burrows at (813) 228-1282, if you have any questions or comments regarding the additional information.

Sincerely,



Robert A. Velasco, P.E., BCEE
Senior Engineer, Air Programs
Environmental, Health & Safety

EHS/rlk/RAV101

Enclosure

cc: Cindy Zhang-Torres, FDEP SW District
Diana Lee, EPCHC

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AP 42, Fifth Edition, Volume I
Chapter 13: Miscellaneous Sources
13.2.4.3 Predictive Emission Factor Equations

$$E = 0.0032k \frac{\left(\frac{U}{5}\right)^{1.3}}{\left(\frac{M}{2}\right)^{1.4}} Q$$

where:

- E = Estimated gypsum emissions (lb/yr)
- Q = Gypsum processing rate (70,000 tons/yr)
- k = Particle size multiplier (10 μ m, k= 0.35 dimensionless)
- U = Mean wind speed (8 mph)
- M = Material moisture content (20%)

$$E = 0.0032(0.35) \frac{\left(\frac{8}{5}\right)^{1.3}}{\left(\frac{20}{2}\right)^{1.4}} (70,000)$$

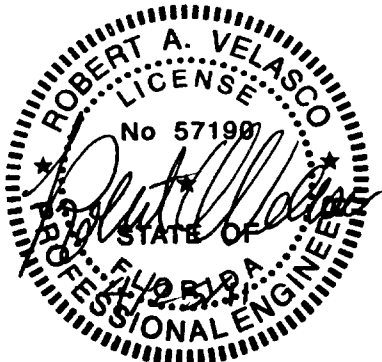
$$E = 5.8 \text{ lb/yr.}$$

$$E = 5.8 \text{ lb/yr} < 5 \text{ ton/yr.}$$

**Tampa Electric Company
Big Bend Station**

**Big Bend FGD Gypsum Fines Filter Project
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Professional Engineer Certification

1. Professional Engineer Name: Robert A. Velasco, P.E. Registration Number: 57190
2. Professional Engineer Address... Organization/Firm: Tampa Electric Company Street Address: P.O. Box 111 City: Tampa State: FL Zip Code: 33601
3. Professional Engineer Telephone Numbers... Telephone: (813) 228 - 4232 Fax: (813) 228 - 1308
4. Professional Engineer E-mail Address: ravelasco@tecoenergy.com
5. Professional Engineer Statement: <i>(1) Engineering opinion and information included herein provides reasonable assurance of meeting the requirements of the Title V permit and Chapter 62-213.410 (2) F.A.C.;</i> <i>(2) Title V Notification of Change without Permit Revision is based on information best available information and is believed to be correct to the best of the Engineer's knowledge;</i> <i>(3) Emission information is based on acceptable techniques available for calculating emissions or estimating emissions of unregulated emission units from materials, information and calculations contained in this certification; and</i> <i>(4) Seal does not certify or attest to the accuracy of work or information prepared by others who are qualified to perform such services.</i>
 A circular professional engineer seal for Robert A. Velasco, License No. 57190, State of Florida. The seal contains the text 'ROBERT A. VELASCO', 'LICENSE', 'No 57190', 'STATE OF FLORIDA', and 'PROFESSIONAL ENGINEER'. A signature is written across the seal.
_____ Signature/Date (seal)