



Department of Environmental Protection

Lawton Chiles
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

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SEP 10 1998
BUREAU OF
AIR REGULATION
Virginia B. Wetherell
Secretary

Ms. Theresa J. L. Watley,
Consulting Engineer, Environmental Planning
Tampa Electric Company
P.O. Box 111
Tampa, Florida 33601-0111

September 8, 1998

Dear Ms. Watley:

Re: TECO F. J. Gannon Unit 3
Wood Derived Fuel Air Test Burn/Operating Permit Amendment
(DEP Project No. 0570040-008-AC)

On August 10, 1998, the Department received your air pollution operation permit amendment application for F.J. Gannon Unit 3. This request was for the permit (AO29-172179) to be amended to allow for the firing of a coal and wood derived fuel (WDF) blend in this unit. In order to continue processing the application, the Department will need additional information pursuant to Rule 62-4.070(1), F.A.C.

Our understanding of the PSD situation regarding this application is as follows:

1. That this change constitutes a modification in that it is a physical and operational change (the addition of a fuel for which the unit was not previously equipped to burn) that results in an increase in actual emissions.
2. The "increase in actual emissions" mentioned above refers to prior actual emissions compared to future actual (i.e. allowable) emissions in accordance with the definition of actual emissions in Rule 62-210.200(12)(d), F.A.C.
3. If the increase in actual emissions referred to above, on a tons/year basis, exceeds the PSD significant levels as shown in Table 212.400-2 contained in Rule 62-212, F.A.C. then PSD is triggered.

The PSD Applicability Analysis submitted with your request did not directly address PSD applicability on the above basis, but rather addressed the change in emissions on a fuel trade-off basis using differences in fuel analysis between all coal and a coal/10% WDF blend. Regardless of the change in hourly emission rate (and the test burn test results (CEM and stack test based) do show an increase in emissions for SO₂, NO_x, and VOC when firing the coal/WDF blend), on an actual to allowable basis this modification to add WDF would be a PSD triggering situation.

For your information, by copy of this letter to Mr. Al Linero of the Tallahassee BAR New Source Review Section, we are requesting a determination as to whether they concur that our above interpretation is correct.

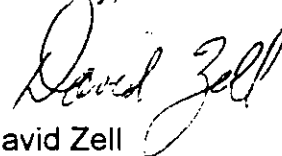
In response to this request for more information, please submit further justification as to the non-applicability of PSD, or transfer this request to Tallahassee NSR Section (along with the applicable fee) as a PSD application.

In addition to the above, please find attached a Hillsborough County EPC letter of September 3, 1998 which raises other issues and questions which may have to be addressed when the more fundamental issues above are resolved.

"Notice: Pursuant to the provisions of Section 120.600, F.S. and Subsection 62-12.070(5), F.A.C., if the Department does not receive a response to this request for information within 90 days of the date of this letter, the Department will issue a final order denying your application. You need to respond within 30 days after you receive this letter, responding to as many of the information requests as possible and indicating when a response to any unanswered questions will be submitted. If the response will require longer than 90 days to develop, an application for new construction should be withdrawn and resubmitted when completed information is available. Or for operating permits, you should develop a specific time table for the submission of the requested information for Department review and consideration. Failure to comply with a time table accepted by the Department will be grounds for the Department to issue a Final Order for Denial for lack of timely response. A denial for lack of information or response will be unbiased as to the merits of the application. The applicant can reapply as soon as the requested information is available."

If you have any questions concerning this letter, please call me at (813) 744-6100 extension 118.

Sincerely,



David Zell
Air Permitting Engineer
Southwest District Office

DRZ/

attachment

copies to:

- Al Linero, Tallahassee DARM BAR, NSR Section
- Leroy Shelton, Hillsborough County EPC, Air Management Division

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September 3, 1998

Jerry Kissell, P.E.
Florida Department of Environmental Protection
Southwest District
3804 Coconut Palm Drive
Tampa, FL 33619

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Dear Jerry;

The following comments are offered on the proposed Air operating Permit for TECO Gannon's Unit 3 to burn Wood Derived Fuel.

Test Results:

1. If you look only at the test results in section 4.0, the test results do fall within permitted limits. Solely based on that, this unit would apparently be able to accommodate the proposed fuel within the existing limits. However, those same test results do show an increase in emissions in several pollutants using the WDF fuel blend.

The PSD applicability analysis (Attachment B):

2. Attachment B, note 2, says the material content in fuel ratio is based on the ratio of ash, sulfur, and nitrogen in paper pellets versus coal samples. The emissions changes are not based on the test results. The PSD analysis goes on to project an apparent emissions decrease based on the fuel ratio.

3. The applicability analysis only addresses the contribution of the WDF, implying that there will be a 616.2 tpy decrease in SO₂ emissions, for example. It completely ignores the emissions contributed by coal portion of the fuel blend and the stack test results.

4. If you use the test results, section 4.0, there is an increase in the emissions from the coal baseline to the WDF on both the CEMS and the stack test results. For example:

CEMS Data:	Baseline	Fuel Blend	Units
Opacity	4	4	%
SO ₂	1.80	1.84	lb/MMBtu
NOx	0.92	0.96	lb/MMBtu

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Stack Test Data:

PM	0.03	0.03	lb/MMBtu
H ₂ SO ₄	0.04	0.04	lb/MMBtu
SO ₂	1.83	1.99	lb/MMBtu
VOC	0.003	0.006	lb/MMBtu
HCl	0.04	0.07	lb/MMBtu
VE	0	0	%

5. If you use the more conservative SO₂ CEMS increase of 0.04 lb/MMBtu, the SO₂ emissions increase would be 160.55 tpy.

6. Why is there such a large difference between the actual annual heat input between 1996 & 1997 on the PSD applicability analysis chart? Note: our copy of the 1996 AOR for unit 3 showed a total of 6,951,725 MMBtu for coal only.

7. Where did the 94% Coal/6% WDF Blend numbers come from that are included in table 3 of the test results (section 4.0)?

8. As discussed with Rick Kirby, this application does appear to constitute a modification of the coal yard permit to allow the bunkering of WDF.

9. Also, I noted that the reason the test were postponed from 1997 to 1998 was because of handling problems with the WDF that required modifications in the handling yard.

10. The test authorization says the test should be conducted with a blend of 8-10% paper pellets, 8-10% WDF, and 80% coal. This test was apparently conducted with 93.7% coal and 6.3% paper pellets.

11. Note: this is the first time we have seen the test results of the WDF tests which were originally authorized in March 1997, but postponed until May & June 1998.

If you have any questions, please contact us at (813)-272-5530.

Sincerely,



Leroy Shelton
Chief, Air Toxics