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Memorandum

Florida Department of Environmental Protection

TO: Scott Sheplak, Title V Section

FROM: Jeff Koerner, New Source Review section

CC: Al Linero, New Source Review Section

DATE: March 28, 2001

SUBJECT: Project No. 0570040-011-AC
F.J. Gannon Station
Request to Combust WDF in Units 1, 2, and 4

As requested, I reviewed the response to your request for additional information and have the following comments:

Item 1

- Perhaps we should prohibit processed materials from other sources from being fired at this plant. For example, U.S. Sugar occasionally transfers bagasse from the Bryant sugar mill to the Clewiston sugar mill for use as a boiler fuel. So, you can't rely on the maximum processing rate of the on-site sugar mill to physically limit the annual bagasse-firing rate for the boilers. Similarly, what would prevent TEC from trucking in "pre-processed" WDF?
- TEC states that the total emissions of SO_2, NOx, and PM are limited by Permit No. 0570040-006-AC. Note that these are allowable emissions. From a "New Source Review" perspective, the fact that the plant is not operating up to capacity could mean that it is *more likely* that the PSD Significant Emission Rates would be exceeded when adding a new fuel. How do they measure the emissions to demonstrate compliance with the limits? CEMS? Annual tests?
- Have they provided a comparison of the future actual annual emissions to the past actual annual emissions?
- In the last sentence, TEC states that, "Therefore, any increase in emissions from the combustion of WDF will need to be offset by a reduction in emissions from the combustion of coal." This seems logical, but how would they do it? Isn't this why we asked for a requirement to operate within the existing coal yard heat input limit? However, because of the differences in heat input, even this requirement may not satisfactorily limit annual emissions increases below the PSD Significant Emission Rates. Also, remember that TEC has stated that one purpose of adding WDF was to meet commitments related to providing electrical power from "renewable energy sources". The request to fire WDF on top of the currently permitted coal-firing levels conflicts with this stated purpose.

Item 2

- Any permit issued as a result of this request should include a requirement that prohibits coal firing (and any WDF materials) on or before December 31, 2004.

Item 3

- Tests were conducted for which pollutants when firing what types of fuels?
- "Paper pellets, yard trash, wood chips, and 'other types of WDF' " are also fired in municipal waste combustors.

- Tests for each type of WDF, for all pollutants, and a new PSD applicability analysis should be required before authorizing any new fuel.
- TEC requests to fire the amounts and types of WDF in Units 1, 2, and 4 that were previously authorized for Unit 3 in Permit No. 0570040-006-AC. The purpose of their request is to provide the flexibility to fire the amounts and types of WDF in any of the four boilers. This seems like they are requesting cap on the total amount of WDF fuel that can be fired in all four boilers based on the current allowable rate that can be fired in Unit 3 alone. Although this sounds reasonable, was a PSD applicability analysis performed when WDF was added to Unit 3? Did Tallahassee issue the AC permit for Unit 3? See previous comment.

Item 4

- I did not have a copy of either test results. We should compare tested WDF-fired emissions rates with both the potential and actual coal-fired emission rates based on the short-term (lb/hour) as well as the long-term (tons per year) emissions.

Let me know if you need something else.