

Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

Certified Mail -- Return Receipt Requested

June 13, 2005

Mr. Daryl Smith
Hillsborough County
601 E. Kennedy Blvd.
Tampa, Florida 33602

Re: **DRAFT Title V Air Operation Permit Renewal No. 0570261-006-AV**
Hillsborough County Resource Recovery Facility

Dear Mr. Smith:

We have begun the review of your Title V permit renewal application received on April 28, 2005. However, we must deem your application *incomplete*, because we need further information relative to the following items:

- The required compliance certification statement signed by the facility's Responsible Official appears to be missing.
- The requested changes to the current Title V permit (Appendix F) would require an air construction permit (AC) to implement.
- Compliance Assurance Monitoring (CAM) exemption justification data. In Appendix G of your Application titled "Compliance Assurance Monitoring (CAM) Rule Applicability Analysis" you state that CAM is not applicable for a number of pollutants with emissions limited by the facility's current Title permit. For reference, we have listed below these specific conditions. As noted in these conditions, in many cases the specified limits are based on *both* NSPS (40 CFR 60, Subpart Cb) and PSD applicable requirements.
- We assume that your position is that CAM Plans are not required for a number of pollutants subject to post-1990 NSPS emission limit (40 CFR, Subpart Cb). *However if there is a BACT or SIP standard for a pollutant that is different (either more stringent or less stringent) from the one addressed by the NSPS or NESHAP, CAM may still apply to the emissions unit for that standard.* Based on this finding, please provide the additional analysis required, and submit the necessary CAM plans if warranted.
- Even though the units are exempt from the CAM requirements for the NSPS established PM limit, they are still subject to the CAM requirements for the PSD established PM limit unless, or until, the PSD limit is removed. Please propose a CAM plan that will provide reasonable assurances of compliance with the PSD established PM emissions

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limit. The plan should include the use of the COMS, and the pressure drop across the baghouse, as monitored indicators.

- Please note that the Department is currently exploring the ramifications of removing what appear to be less-restrictive PSD standards from existing PSD permits for renewals of Title V permits for resource recovery facilities, leaving only the NSPS imposed standards, in order to alleviate compliance conflicts and to eliminate duplicative monitoring requirements. Therefore, to aid in the determination that the NSPS standards truly are more restrictive than the PSD standards, please provide a mathematical comparison of the different standards for each of the pollutants currently regulated in your permit. This comparison will need to closely consider the respective averaging times and the required adjustment percentages to either O₂ or CO₂, as appropriate.
- In the CAM applicability analysis table, the baghouse efficiency is assumed to be 90%. This is quite low compared to typical baghouse efficiencies. At higher efficiencies, potential pre-control emissions could be much greater than listed in the table. Please explain the reasoning behind assuming a baghouse efficiency of only 90%.
- The submitted CAM applicability analysis states that there is no control device for lead. However, lead is controlled by the baghouse. Based on the allowable emissions limits and a typical baghouse efficiency, pre-controlled lead emissions are potentially greater than the Title V threshold of 5 tons per year, which subjects the units to CAM for controlled emissions of lead. Please propose a CAM plan that will provide reasonable assurances of compliance with the PSD established lead emissions limit. The plan should include the use of the COMS, and the pressure drop across the baghouse, as monitored indicators.
- The submitted CAM applicability analysis states that the Ash Building and Handling System (EU 100), the Lime Storage Silo (EU 101), the Activated Carbon Storage Silo (EU 102), and the Dolomitic Lime Storage Solo (EU 106) are not subject to CAM. That determination appears to be based on an assumed baghouse efficiency of only 90%, however, typical baghouse efficiencies are generally greater than 99%. At a baghouse efficiency of 98%, the potential PM emissions from the units are, of course, greater. Please submit CAMs plan for PM emissions from these units that are controlled by a baghouse, if the recalculated potential PM emissions exceed the Title V threshold of 100 tons per year. Also, it appears that the emission limitation for PM for the Ash Handling Facility stated in the CAM Applicability Analysis table is in error and should be corrected. In addition, the table states that there is no control device for the PM emissions from the Activated Carbon Storage Silo. We note that the current Title V permit for the facility specifies that this emissions unit has a baghouse.
- The submitted CAM plans for fluoride emissions and sulfuric acid mist emissions specify that the spray dryer absorber SO₂ removal efficiency will be used as an indicator to demonstrate that the fluoride emissions and sulfuric acid mist emissions are being adequately controlled. However, no test data were submitted to demonstrate a correlation between the SO₂ removal efficiency and actual fluoride emissions and sulfuric acid mist emissions. Please provide tables of test data that compare the measured SO₂ removal efficiency to the actual fluoride emissions and sulfuric acid mist emissions measured during the five most recent stack tests (fifteen data points). Include any available test data that shows what the fluoride emissions and sulfuric acid mist

- emissions are prior to the spray dryer absorber. Also, prepare and include the Monitoring Approach table that is required to be submitted as part of a complete CAM plan.
- When we receive this information, we will continue processing your application. If you have any questions, please contact Tom Cascio at 850-921-9526.
 - 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. Permit applicants are advised that Rule 62-213.420(1)(b), F.A.C., requires applicants to respond to requests for information within 90 days, unless the applicant has requested in writing, and has been granted, additional time within 90 days.

Selected Specific Conditions of 0570261-005-AV:

Particulate Matter

C.15. The emission limit for particulate matter contained in the gases discharged to the atmosphere from each MWC unit is 27 milligrams per dry standard cubic meter or 0.012 grain per dry standard cubic foot, corrected to 7 percent oxygen (equivalent to 0.024 lb/MMBtu, heat input and 4.1 lbs/hr) and 17.96 tons/yr.

[40 CFR 60.33b(a)(1)(i) and PSD-FL-121(C)]

Cadmium

C.17. The emission limit for cadmium contained in the gases discharged to the atmosphere from each MWC unit is 0.040 milligrams per dry standard cubic meter, corrected to 7 percent oxygen (equivalent to 3.47E-05 lb/MMBtu, heat input and 6.00E-03 lb/hr) and 0.026 ton/yr.

[40 CFR 60.33b(a)(2)(i) and PSD-FL-121(C)]

Mercury

C.18. The emission limit for mercury contained in the gases discharged to the atmosphere from each MWC unit is 0.070 milligrams per dry standard cubic meter or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent (equivalent to 1.17E-04 lb/MMBtu, heat input or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent and 0.020 lb/hr or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent) and 0.087 ton/yr.

[40 CFR 60.33b(a)(3); Rule 62-296.416(3)(a)1., F.A.C.; and, PSD-FL-121(C)]

Lead

C.22. The emission limit for lead contained in the gases discharged to the atmosphere from each MWC unit is 0.44 milligrams per dry standard cubic meter, corrected to 7 percent oxygen (equivalent to 3.81E-04 lb/MMBtu, heat input and 0.065 lb/hr) and 0.288 ton/yr. [40 CFR 60.33b(a)(4) and PSD-FL-121(C)]

Sulfur Dioxide (CEMS used for compliance.)

C.23. The emission limit for sulfur dioxide contained in the gases discharged to the atmosphere from each MWC unit is 29 parts per million by volume or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent (equivalent to 0.190 lb/MMBtu, heat input or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent and 32.86 lbs/hr or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent) and 143.9 tons/yr. Compliance with this emission limit is based on a 24-hour daily geometric mean. [40 CFR 60.33b(b)(3)(i) and PSD-FL-121(C)]

Hydrogen Chloride

C.24. The emission limit for hydrogen chloride contained in the gases discharged to the atmosphere from each MWC unit is 29 parts per million by volume or 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent (0.099 lb/MMBtu, heat input or 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent and 17.00 lbs/hr or 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent) and 74.43 tons/yr. [40 CFR 60.33b(b)(3)(ii) and PSD-FL-121(C)]

Dioxins/Furans

C.25. The emission limit for dioxins/furans contained in the gases discharged to the atmosphere from each MWC unit that do not employ an electrostatic precipitator-based emission control system is 30 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen (equivalent to 2.60E-08 lb/MMBtu, heat input and 4.5E-06 lb/hr) and 1.96E-05 ton/yr. [40 CFR 60.33b(c)(1)(ii) and PSD-FL-121(C)]

Nitrogen Oxides (CEMS used for compliance.)

C.26. The emission limit for nitrogen oxides contained in the gases discharged to the atmosphere from each MWC unit is 205 parts per million by volume, corrected to 7 percent oxygen, dry basis (equivalent to 0.34 lb/MMBtu, heat input and 58.63 lbs/hr) and 256 tons/yr. Compliance with this emission limit is based on a 24-hour daily arithmetic mean.

Nitrogen oxide emissions from the auxiliary burners are approximately 3.45 lbs/hr and 15.1 tons/yr per unit. These emissions are part of, and not in addition to, combustor emissions. Allowable emissions for MSW combustors include auxiliary burners. This facility is limited to a 10 percent (0.10) or less, total annual gross heat input for natural gas consumption. Auxiliary burners for each MWC unit shall be fired only by natural gas, and consumption of natural gas shall not exceed 104,937,500 cubic feet per MWC unit in any calendar year (i.e., annual capacity factor for natural gas of 10% or less as determined by 40 CFR 60.44b(d)).

[40 CFR 60.33b(d) and PSD-FL-121(C)]

Carbon Monoxide (CEMS used for compliance.)

C.27. The emission limit for carbon monoxide contained in the gases discharged to the atmosphere from each MWC unit is 100 parts per million by volume, measured at the combustor outlet in conjunction with a measurement of oxygen concentration, corrected to 7 percent oxygen, dry basis (equivalent to 0.101 lb/MMBtu, heat input and 17.4 lbs/hr) and 76.26 tons/yr. Calculated as an arithmetic average. Averaging time is a 4-hour block average.

[40 CFR 60.34b(a); Rules 62-212.400(2)(g) and 62-212.400(5), F.A.C.; and, PSD-FL-121(C)]

Beryllium

C.29. The emission limit for beryllium contained in the gases discharged to the atmosphere from each MWC unit is 1.48 micrograms per dry standard cubic meter, corrected to 7 percent oxygen (equivalent to 1.27E-06 lb/MMBtu, heat input and 2.18E-04 lbs/hr) and 9.6E-04 ton/yr.

[Rules 62-212.400(2)(g) and 62-212.400(5), F.A.C.; and, PSD-FL-121(C)]

Fluoride (CAM plan provided in Application.)

C.28. The emission limit for fluoride contained in the gases discharged to the atmosphere from each MWC unit is 6.74 milligrams per dry standard cubic meter, corrected to 7 percent oxygen (equivalent to 0.0059 lb/MMBtu, heat input and 1.00 lbs/hr) and 4.43 tons/yr.

[PSD-FL-121(C)]

Volatile Organic Compounds

C.30. The emission limit for volatile organic compounds contained in the gases discharged to the atmosphere from each MWC unit shall not exceed 0.01 grain per dry standard cubic foot, corrected to 12 percent carbon dioxide or 0.2 lb/ton, whichever is more restrictive, to be demonstrated during the initial compliance test, only.

[PSD-FL-104 and PSD-FL-121(C)]

Mr. Daryl Smith
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Sulfuric Acid Mist (CAM plan provided in Application.)

C.31. The emission limit for sulfuric acid mist contained in the gases discharged to the atmosphere from each MWC unit shall not exceed 0.072 grain per dry standard cubic foot, corrected to 12 percent carbon dioxide, to be demonstrated during the initial compliance test, only.

[PSD-FL-121(C)]

Sincerely,

A handwritten signature in black ink, appearing to read "A. A. Linero". The signature is fluid and cursive, with the first name "A. A." and the last name "Linero" clearly distinguishable.

A. A. Linero, P.E.
Program Administrator
Permitting South Section

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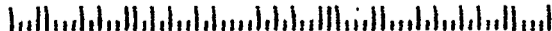
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