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January 17, 2006

BUREAU OF AIR REGULATION

Mr. A.A. Linero, P.E.
Administrator, South Permitting Section
Division of Air Resource Management
Florida Department of Environmental Protection
2600 Blair Stone Road, MS#5505
Tallahassee, FL 32399-2400

Subject: Supplemental Information
Hillsborough County Resource Recovery Facility Expansion
Application for Power Plant Site Certification, dated November 18, 2005

Dear Mr. Linero:

Thank you for taking the time to meet with us in December to discuss our application for expansion of the Hillsborough County Resource Recovery Facility. The discussion was quite useful for us; we trust that it was for you and your staff as well.

At our meeting, you supplied us with additional information related to the Brescia Waste-to-Energy Facility in Italy. We have reviewed this information and have obtained additional data from Brescia which we would like to share with you. As you stated at the meeting, the Brescia facility does indeed have a proven track record at controlling NO_x using SNCR technology to approximately 70 ppm_{dvc} (part per million by dry volume corrected to 7% oxygen). We will continue studying the operational practices at Brescia and other SNCR facilities to gain further insight into how low the Hillsborough facility can consistently operate.

The attached two data sheets present information and emissions data from the Brescia Facility. As shown on the second data sheet, the NO_x emissions averaged 48 ppm_{dvc}, over 44 days of emissions testing. The NH₃ emissions averaged 53 ppm_{dvc} with a range of 15 to 107 ppm_{dvc}. We are concerned with the relatively high amount of NH₃ slip that these data indicate. Significant amounts of ammonia slip inevitably result in a highly opaque ammonium chloride plume that is not necessarily recorded by the opacity monitor. The Hillsborough facility's location in a coastal environment will likely accelerate the formation of ammonium chloride. Facility aesthetics are of utmost concern to Hillsborough County, and



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any visible plume observed from the stack will detract from the highly successful reputation that the facility has developed since beginning operation over 20 years ago.

Significant NH_3 slip emissions may also be problematic with respect to the implementation of the USEPA's PM 2.5 rules. NH_3 has been identified as a PM 2.5 precursor. Achieving lower NO_x emissions at the cost of higher NH_3 emissions (as the Brescia data suggest) may ultimately be less beneficial to the environment as a whole, especially when one considers the relatively small gains in NO_x reduction that is achieved.

One option for mitigating this potential problem is the installation of an ammonia scrubber following the baghouse. We are in the process of contacting vendors and will report back to you and your staff once we have sufficient technological and cost details for such equipment. We will also evaluate the environmental impact resulting from the discharge of ammoniated wastewater from this process.

As also discussed with you in December, we would like to make a correction to our application as relates to the proposed emission limitation for mercury. On page 2-7, Table 2-3, and on page 3-54, we incorrectly state that BACT for Hg is 70 or 134 ug/dscm, respectively. Although the use of activated carbon injection to achieve 85% removal in these application sections is correct, the two outlet concentrations cited are not. BACT for Hg should be 28 ug/dscm, or 85% control, consistent with the NESCAUM guidance that has been adopted by New England and mid-Atlantic states, and that currently applies to numerous waste-to-energy facilities operating in the Northeast.

We are re-evaluating our determination of BACT for cadmium. This is necessary because the USEPA recently issued a proposed revision to the NSPS and Emissions Guidelines standards for large municipal waste combustors subsequent to our application submittal in early December. The proposed NSPS contains a Cd standard that is lower than that which we proposed as BACT. As soon as we have had an opportunity to review EPA's data set that was used as rationale for the new proposed standard, we will report back to you and your staff and re-define BACT if necessary.

Finally, we are sending you, under separate cover, a correction page for the permit application forms contained in Volume III, Appendix C, of the application. This page, page 2 of the forms, has been edited to show that the application is for an air construction permit, and not for concurrent processing of the air construction permit and Title V air operation permit.



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Thank you for giving us the opportunity to discuss these very important matters with you. We look forward to working with you and your staff to determine the best available control technologies for the Hillsborough Facility.

Very truly yours,

A handwritten signature in cursive script that reads "Frank Sapienza".

Frank Sapienza, P.E.

Principal, Senior Project Engineer

Camp Dresser & McKee Inc.

cc: Tom Smith, Hillsborough County

David Dee, Young van Aseenderp, P.A.

Jason Gorrie, Dan Strobridge, Cynthia Hibbard, CDM

cc: *Scott Shepley*

Jason Weeks, SUD

Alice Harman, CPCHC

Kathleen Forney, CPA Region 4