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September 04, 2009

BUREAU OF AIR REGULATION

Ms. Trina Vielhauer Chief, Bureau of Air Regulation Florida Department of Environmental Protection Bob Martinez Center 2600 Blair Stone Road Tallahassee, FL 32399-2400

Re: North County Resource Recovery Facility;

FDEP Project No. 0990234-015 AC/PSD-FL-108H; Comment on Draft Permit Issued July 31, 2009

Dear Ms. Vielhauer,

On July 31, 2009, the Florida Department of Environmental Protection ("Department" or "FDEP") issued a draft permit to construct (DEP permit No. 0990234-015-AC) for the refurbishment project at the North County Resource Recovery Facility ("Facility") of the Solid Waste Authority of Palm Beach County ("Authority"). The Intent to Permit notification was published in The Palm Beach Post newspaper on August 5th, 2009, starting the required 30 (thirty) day notice for the permit. The proof of publication was submitted to the FDEP on August 7, 2009.

The Authority's initial review of the draft permit raised several questions, which prompted the Authority to request an extension of time to file a petition for hearing. This request was granted by FDEP (OGC No. 09-3353), providing the Authority until September 14, 2009 to file a petition for hearing, if required.

The Authority carefully reviewed the draft permit and then discussed the Authority's questions with the Department's staff. Based on the staff's responses, the Authority has concluded that its concerns can be addressed by filing the following comments and by requesting clarification of several provisions in the draft permit. The Authority is not electing to file a petition for an administrative hearing.

For clarity, the Authority's comments have been arranged in the order that the item occurs in the Department's draft permit or document, and the Authority's comments reference the page number in the draft permit. The Authority suggests the deletion of the

language shown as strikeout text, and the addition of language shown as underlined and italicized text.

<u>Comments on the Draft Permit and Technical Evaluation and Preliminary</u> Determination (TEPD).

1. Continuous Monitors - General Permit Description:

(Permit, Page 4 of 8)

The Authority requests the deletion of the reference to the continuous monitor for stack gas flow from this section of the draft permit. The Authority's facility currently does not have continuous monitoring equipment to measure the stack gas flow rate from each unit. The continuous monitoring requirements listed in the permit do not include a specific condition for a stack gas flow rate monitor. The Authority will calculate the stack gas flow rate in a manner consistent with Rule F.A.C. 62-210.370. Further, the Authority's Facility already has monitors that continuously measure the Facility's steam production. It would be appropriate to add these monitors to the Facility description, as shown by the underlined text below:

Continuous Monitors: Each unit uses the following equipment to continuously monitor the following pollutants and parameters: continuous emissions monitoring systems (CEMS) for CO, carbon dioxide (CO₂), NO_X and sulfur dioxide (SO₂); continuous opacity monitoring system (COMS) for opacity; and continuous monitoring systems (CMS) for the temperature of the flue gas stream at the fabric filter inlet, the stack gas flow steam production, and urea injection rate.

2. Item 7 Combustion Control and OFA Air System

(Permit, Page 6 of 8)

The Authority requests the addition of the word "unwanted" to more accurately describe the effects of the new combustion control system.

7. Combustion Control and OFA Air System: The permitee shall install new combustion control systems and improved OFA systems on each unit to optimize combustion performance while minimizing the <u>unwanted</u> products of combustion.

3. Item 8 Activated Carbon Injection

(Permit, Page 6 of 8)

The Authority requests the replacement of the word "Activate" in the title with the word "Activated."

8. Activated Carbon Silo Baghouse

4. <u>Item 16d</u>, <u>Emissions Performance Testing</u>

(Permit, Page 7 of 8)

The Authority requests that the FDEP confirm that the requirements for emissions performance testing for demonstrating compliance with the permit limits for NOx, CO and SO_x are consistent with those in the PSD permit PSD-FL-108A, Specific Condition 4.

5. <u>Item 18. Revised Permit Conditions</u>

(Permit, Page 8 of 8)

Placard Page, 2nd Paragraph

The Authority requests that clarification language be added to emphasize that the quality of RDF is inherently variable and therefore the heat input to the boilers will also vary. The suggested text to be added to the end of this paragraph is provided below.

As noted in the Technical Evaluation and Preliminary Determination (page 8 of 13), the quality of the RDF is inherently variable and its heating value ranges from 4,500 to 6,200 Btu/lb. For that range of heating values, the heat input may also vary from 337.5 to 465 MMBtu/hr. For this reason, compliance is based upon steam production, rather than heat input.

6. <u>Item 3 Excess Emissions, Common Conditions</u>

(Appendix C, Page C-1)

The Authority request that clarification language be added to this condition to reflect the authorization granted by FDEP in the existing Title V permit (Specific Condition 3.E.a). If this clarification is not acceptable, the Authority would request that this language be added as a separate special condition to ensure no conflicts between the Common Condition and the Title V permit.

In this case, the duration of startup, shutdown, or malfunction periods is limited to three hours per occurrence, except as provided in CFR 60.58b(a)(1)(iii). [Permit No. 0990234-013-AV]

7. Item 11 Annual Operating Report, Common Conditions (Appendix C, Page C-1)

The Authority request that the specified due date of the Annual Operating Report is changed to reflect the current Rule.

11. Annual Operating Report: The permitee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st April 1st of each year. [Rule 62-210.370(3), F.A.C.]

8. SNCR System, Department Review

(TEPD, Page 6 of 13)

The Authority requests a correction of the ammonia slip design specification value appearing at the end of the second paragraph to be consistent with the value in the first paragraph.

To provide system robustness, there will be a 100% redundancy in all pumping systems. The preliminary design target for ammonia slip is $\frac{10}{25}$ ppm by volume @ $\frac{15\%}{2}$.

9. <u>Permit Changes Requested</u> Placard Page, 2nd Paragraph

(TEPD, Page 8 of 13)

The Authority requests that clarification language be added to emphasize that the quality of RDF is inherently variable and, therefore, the heat input to the boilers will also vary. The suggested text to be added to the end of this paragraph is provided below.

As noted in the Technical Evaluation and Preliminary Determination (page 8 of 13), the quality of the RDF is inherently variable and its heating value ranges from 4,500 to 6,200 Btu/lb. For that range of heating values, the heat input may also vary from 337.5 to 465 MMBtu/hr. For this reason, compliance is based upon steam production, rather than heat input, as noted in the first sentence.

10. <u>Air Pollution Control System Upgrade</u>, <u>Attachment A</u> (TEPD, Page 11 of 13)

The Authority requests a revision to the text describing the work that will be done to the Spray Dryer Absorber (SDA or scrubber). After submitting its application for a DEP construction permit for the refurbishment project, the Authority concluded that it should replace the Facility's scrubber. The proposed work on the scrubber will increase the operating efficiency of the scrubber. The proposed work is described below, in the italicized text that should be added to the Technical Evaluation and Preliminary Determination.

The proposed work on the scrubber will not constitute a "modification" of the Facility, as defined under the PSD and NSPS programs. The work on the scrubber will not increase the Facility's (a) MSW or RDF processing capacity, (b) steam generating capacity, or (c) short-term or long-term emissions of acid gases.

The proposed work on the scrubber does not affect the Authority's prior determination that the Authority's refurbishment project does not constitute a "reconstruction" of the Facility. The SDA is not part of the "MWC unit," as defined in 40 CFR 60.51b. Consequently, the cost of the work on the SDA is not considered when determining whether the proposed work on the MWC constitutes a reconstruction of the MWC unit.

Page A-1 in the Attachment to Section A of the Permit Application discusses the SDA work that was proposed. The original scope included two (2) refurbishments of the upper and lower SDA internals, including upper cones, turning vanes, diffusers, internal stiffeners for the supports and 3-ft (conical and cylindrical) bands at the hopper to cylinder weld. The revised scope includes two (2) spray dryer absorbers (SDA) with five (5) lime injection nozzles to increase contact efficiency and a live bin activator to enhance fly ash removal. The original lime slaking, tanks, and feed equipment remain.

Two refurbishments of the upper and lower SDA internals, including upper cones, turning vanes, diffusers, internal stiffeners for the supports and 3 foot (conical and cylindrical) bands at the hopper to cylinder weld

A new SDA will be installed. The design of the SDA will be similar to, but better than, the design of the current SDA. The new SDA will be equipped with multiple injection nozzles and baffles to increase the operating efficiency of the scrubber. The baffles will induce laminar flow and a slightly taller vessel height will provide a longer flue gas residence time in the SDA.

11. Air Pollution Control System Upgrade, Attachment A

(TEPD, Page 12 of 13)

The Authority requests a minor correction to the listed voltages to reflect those presented in the application.

Replace two 13.9 13.8 kV/480 V transformers Reinsulation of 13.9 13.8 kV switchgear

The Authority greatly appreciates the FDEP's time and effort in preparing the construction permit for the Authority's refurbishment project. Should you have any questions or require clarification about any of these comments, please contact me at 561-640-4000.

Sincerely,

SOLID WASTE AUTHORITY OF PALM BEACH COUNTY

Mark Hammond

Executive Director

mark M

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