

February 10, 2014

Mr. Syed Arif, P.E.
Permitting Section Administrator
Office of Permitting and Compliance
Division of Air Resource Management
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: Solid Waste Authority of Palm Beach County

Palm Beach Renewable Energy Facility No. 2

Air Permit Nos. 0990234-017-AC (PSD-FL-413) and 0990234-023-AC (PSD-FL-413B)

**Baghouse System Monitoring** 

Dear Mr. Arif:

The Solid Waste Authority of Palm Beach County (Authority) is submitting information with respect to the baghouse system monitoring requirements specified in the air construction permits (Air Permit No. 0990234-017-AC (PSD-FL-413) and Air Permit No. 0990234-023-AC (PSD-FL-413B)) issued for the Palm Beach Renewable Energy Facility No. 2 (PBREF No. 2). As we recently discussed with the Department, the contractor selected to construct and operate the facility, Babcock & Wilcox (B&W), has provided updated design specifications for the baghouse systems. The baghouse systems being installed at PBREF No. 2 will include pressure drop and bag leak detection monitoring as required in Section 3, Conditions 31 and 32 of the air construction permit. While the Authority believes the baghouse monitoring systems will meet the intent of the monitoring prescribed by the permit, the pressure drop monitoring will not correspond exactly to the requirement to monitor the pressure drop across each compartment as specified in Condition 31. However, we view B&W's baghouse monitoring approach overall as more robust than the baghouse monitoring required by the permit in recognition that the design features on-line cleaning and that bag leak detection will be provided within each compartment, which is additional detection than that which is specified in Condition 32. The enclosed information from B&W provides a more detailed comparison of the baghouse design and the permit specifications (see attached letter dated February 5, 2014).

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To incorporate the subtle differences between the permit language and the baghouse monitoring systems being installed, the Department has recommended that the monitoring requirements be revised during the Title V permitting process as an "as-built" change. We are in agreement with this approach, and our plans are to request that the baghouse monitoring requirements be revised to reflect the installed systems in our Title V permit application submittal for the new facility.

We appreciate the Department's continued assistance during the design and construction phase of the new facility. If you have any questions concerning our intended approach, please contact Mr. Joel Cohn with ARCADIS at (757) 873-4411 or via e-mail at Joel.Cohn@arcadis-us.com.

Sincerely,

Mark Hammond Executive Director

Solid Waste Authority of Palm Beach County

## MH/kal

Enc: Letter dated February 5, 2014 from Michael D. Fick

Project Director, B&W

Cc: M. Bruner, SWA

R. Schauer, SWA

P.Carroll, SWA

M. Morrison, SWA

C. Mulkey, DEP Siting

L. Richter, ARCADIS

J. Cohn, ARCADIS

## SENT VIA EMAIL

February 5, 2014

Mr. Patrick Carroll Solid Waste Authority of Palm Beach County Director of Facilities Development 17501 North Jog Road West Palm Beach, FL 33412

Subject:

**Baghouse Pressure Drop** 

Dear Patrick:

The Babcock & Wilcox Power Generation Group (B&W) has provided equipment for Palm Beach County Renewable Energy Facility No.2 that it believes meets or exceeds the intent of the Florida Department of Environmental Protection Final Permit No. 0990234-028-AC/PSD-FL-413B in the following sections and requests a word change revision to one of the two paragraphs in question. Paragraphs 31 and 32 under "Other Monitoring Requirements" in the Final Permit state the following:

- 31. Pressure Drop: The permittee shall maintain and calibrate a device which continuously measures and records the pressure drop across each baghouse compartment controlling the PM, sorbent and powdered activated carbon (PAC) emissions for each MWC unit. Records shall be maintained on site and made available upon request. [Rule 62-4.070(3), F.A.C.]
- 32. Bag Leak Detection: The permittee shall maintain continuous operation of bag leak detection systems on each baghouse for each MWC unit including keeping records of the systems measurements. Baghouse leak detection records shall be kept on site and made available upon request. [Rule 62-4.070(3), F.A.C.]

With regards to Paragraph 31, B&W requests the deletion of the highlighted word "compartment" in the first sentence for the following reason; the baghouse will be cleaned on-line (all compartments operating in a filtering mode) which is initiated by a single baghouse differential pressure transmitter that measures total pressure differential from the baghouse inlet to the baghouse outlet. Because each MWC baghouse is cleaned on-line, the pressure drop across each individual compartment will be the same as the total baghouse pressure drop and therefore, individual compartment pressure transmitters will not provide any additional operating data for monitoring purposes.

With regards to paragraph 32, B&W wishes to clarify that it is providing individual bag leak detectors for each compartment on the respective baghouses for each MWC unit. B&W believes the monitoring of broken bag detectors on each baghouse compartment will provide faster response time to locate and replace a failed filter bag.

Your review of B&W's request and clarification to paragraphs 31 & 32 would be appreciated.

Sincerely

Michael D. Fick Project Director

Telephone: 330-860-2676 Email: mdfick@babcock.com

cc: Ray Schauer – SWA Leah Richter – ARCADIS Steve Hennick – KBR Mark Davis – PBRRC Loran Schmidt – B&W