

**WASTE MANAGEMENT** 

2859 Paces Ferry Road SE Suite 1600 Atlanta, GA 30339 (770) 805-4130 (770) 805-9145 Fax

June 15, 2007

RECEIVED JUN 19 2007 Mr. Scott M. Sheplak, P.E. BUREAU OF AIR REGULATION Air Permitting South Section Bureau of Air Regulation Mail Station #5505 **Bob Martinez Center** 

RE: Florida Department of Environmental Protection Letter Dated May 21, 2007, DEP File Number 0930104-014-AC, Application No. 1270-2, Okeechobee Landfill Facility, Okeechobee Landfill, Inc.

Dear Mr. Sheplak:

2600 Blair Stone Road Tallahassee, FL 32399-2400

In a letter dated May 21, 2007, your department requested additional information for the Okeechobee Landfill, Inc. (OLI) PSD air construction permit application submitted on February 28, 2007 (DEP File Number 0930104-014-AC). Attached is a letter from Shaw Environmental, Inc. (Shaw) to OLI dated June 13, 2007 that responds to each comment.

If you have any questions or requests for additional information, the contacts are provided in the Application or you may contact OLI's Compliance Representative for this permit, Mr. David Thorley at 713-328-7404 or dthorley@wm.com or Michele Lersch at 813-786-6807 or mlersch@wm.com.

Respectfully/submitted.

Vice President and Assistant Secretary Waste Management, Inc. of Florida

Cc:

Joseph Fasulo, OLI Mike Stallard, OLI Michelle Lersch, WM David Thorley, WM

Kristin Alzheimer, P.E. Shaw

Bruce Maillet, Shaw Kelly Fagan, Shaw Arijit Pakrasi, Shaw

### Shaw Environmental, Inc.



2790 Mosside Boulevard Monroeville, Pennsylvania 15146

> Tel.: 412.372.7701 Fax: 412.373.7135

Date: June 13, 2007

Mr. John Van Gessel Vice President & Assistant Secretary Waste Management, Inc. of Florida 2859 Paces Ferry Road Suite 1600 Atlanta, Georgia 30339

Re: Response to FDEP Letter Dated May 21, 2007 OLI Class I Area Impact Analysis FDEP File Number: 0930104-014-AC

Dear Mr. Van Gessel:

On May 21, 2007, Okeechobee Landfill Inc. (OLI) received a request for information from the Florida Department of Environmental Protection (FDEP) in response to the permit application (DEP File Number 0930104-014-AC). Below is our response to that request in the same sequence as the FDEP letter.

- 1: Responses to comments in FDEP letter dated April 2, 2007 are being forwarded to separately.
- 2: The Class I analysis was performed with the VISTAS version of the model because that version has been accepted in the past in applications made to FDEP. Also, the meteorological data we received from FDEP was meant to be used with that version of CALPUFF.

As directed by FDEP, we will use the regulatory version of CALPUFF (version 5.711a) in subsequent modeling analyses. This version of CALPUFF requires meteorological data processed with CALMET version 5.53a. We understand that FDEP is in the process of developing this data set for the applicants in Florida. We request FDEP to send us the meteorological data set when completed, for the revised modeling in this project.

3: We reiterate that the "interim" scenario is not a post-modification scenario and of a temporary nature and believe that it should not be considered for Class I impact analysis under the New Source Review (NSR) regulations. The "interim" scenario will require operation of the existing odor control flare and sequential addition of two new flares to cater to the increase generation of landfill gas till the proposed gas treatment plant is operational. The facility does not have any option for any other viable disposal method for the gas due to safety considerations. This scenario does not exist after the Best Available Control technology (BACT) is implemented at this site.

However, as requested by FDEP and to expedite the project, a Class I area impact for the "interim" scenario will be submitted to FDEP for informational purposes. As per recent discussions with FDEP (see Attachment 1), the scenario will be modeled for new sources only. The Class I area impacts will be shown incrementally for each addition of new flare (starting with the existing odor control flare) as per current schedule. Available field test data on average sulfur concentration in the landfill gas will be used for estimating sulfur dioxide emissions. All other emissions will be estimated using the United states Environmental Protection Agency's (USEPA) AP-42 calculation procedures. We believe that this manner of modeling will provide a more representative impact of this scenario.

The Class I area impacts to be assessed will include: i) Class I area significance level impact and Class I area PSD increment impact (if significance level is exceeded); ii) total nitrate and sulfate deposition; and iii) per cent change over natural background visibility. The Class I area impact analysis will be conducted only on the Everglades National Park.

The Biscayne Bay National Park and the Big Cypress National Preserve are Class II areas and therefore will not be included in Class I area impact analysis. For these two Class II areas, information will be provided to FDEP on following parameters as per FDEP's request: i) total nitrate and sulfate deposition; and ii) per cent change over natural background visibility.

The impact assessments will be performed as soon as appropriate meteorological data for CALPUFF version 5.711a is received from FDEP.

Hope we have addressed all comments in FDEP Letter of May 21, 2007. If you have any further comments or questions, please contact the undersigned at (412) 858 3921 or by email at arijit.pakrasi@shawgrp.com.

Sincerely,

Shaw Environmental, Inc.

Arijit Pakrasi, Ph.D., P.E. Senior Consultant

Cc:

J. Fasulo, OLI

M. Stallard, OLI

M. Delgado, OLI

M. Lersch, WM

D. Thorley, WM

B. Maillet, Shaw

K. Fagan, Shaw

Encl: Attachment 1

# ATTACHMENT I TO SHAW ENVIRONMENT, INC. LETTER DATED JUNE 13, 2007 TO MR. JOHN VAN GESSEL, WMI

RECENT DISCUSSIONS WITH FDEP ON CLASS I AREA IMPACT ANALYSIS

----Original Message-----

From: Nelson, Deborah [mailto:Deborah.Nelson@dep.state.fl.us]

Sent: Tuesday, May 22, 2007 2:56 PM

To: Pakrasi, Arijit

Subject: RE: Okeechobee Landfill Project - Class I Area Impact Modeling

Yes, the AAQS is for the Class II analysis.

Debbie Nelson Meteorologist Air Permitting South 850-921-9537 deborah.nelson@dep.state.fl.us

From: Pakrasi, Arijit [mailto:Arijit.Pakrasi@shawgrp.com]

Sent: Tuesday, May 22, 2007 2:54 PM

To: Nelson, Deborah

Subject: RE: Okeechobee Landfill Project - Class I Area Impact Modeling

Understood. One quick question:

I understand that for Class I analysis, we do not show compliance with NAAQS, we show compliance with Class I Significance level failing which, we show compliance with the Class I PSD increment via a cumulative analysis. Is that what you meant?

## Thanks

Arijit Pakrasi, Ph.D., P.E. Senior Consultant Shaw Environmental, Inc. 2790 Mosside Boulevard Monroeville, PA 15146

Ph: 412 858 3921 Fax: 412 372 8968

email: arijit.pakrasi@shawgrp.com

-----Original Message-----

From: Nelson, Deborah [mailto:Deborah.Nelson@dep.state.fl.us]

Sent: Tuesday, May 22, 2007 2:35 PM

To: Pakrasi, Arijit

Subject: RE: Okeechobee Landfill Project - Class I Area Impact Modeling

My comments are as follows:

1. Only the new sources need to be modeled for the interim Significant Impact analysis. If significant, other sources will need to included for increment and aags analyses.

I believe that the below details our conversation. Please note that the EPA and National Park service can comment regarding similar or different issues regarding this project.

Also, please note that the CALMET data will need to be processed with the Regulatory Version of CALMET. While it is understood that other agencies, consulting groups may be developing these data sets, the Department can not give a time frame for which these data sets will be ready or if these data sets will be in a useable format for use by other agencies, consulting groups.

Debbie Nelson Meteorologist Air Permitting South 850-921-9537 deborah.nelson@dep.state.fl.us

From: Pakrasi, Arijit [mailto:Arijit.Pakrasi@shawgrp.com]

Sent: Tuesday, May 22, 2007 11:34 AM

**To:** Nelson, Deborah

Subject: Re: Okeechobee Landfill Project - Class I Area Impact Modeling

### Debbie:

This regards to our conversation this morning regarding the FDEP letter dated May 21, 2007 on the Class I area impact analysis for the Okeechobee Landfill PSD permit application. My understanding of the required analyses is as follows:

- 1: Only the new sources in the interim scenario will have to be modeled. This will include the odor control flare (existing but not permitted yet), and the two new flares to be installed in the next two years prior to installation of BACT.
- 2: Since the schedule of installation of the new sources is staggered in time (depending on generation of landfill gas), the impacts from these new sources could be modeled accordingly to the schedule. For example, the odor control flare will be modeled as installed now; and the impacts from the new flares will be added to the previous impact(s) at the time the flares are planned to go into operation. This will show the time-varying impact of the interim scenario realistically.

- 3: Available measured H2S concentration from site can be used to estimate the more realistic SO2 emission rates from the flares for the interim scenario rather than the very conservative H2S concentration used in the Class II air quality modeling. Adequate documentation will have to be provided to justify the H2S value used for the interim scenario. Emission of other criteria pollutants will be estimated using emission factors since no test data is available.
- 4: The AQRV analysis will include; i) Class I area air quality analysis; ii) total sulfate and nitrate deposition analysis; and iii) visibility analysis.
- 5. Though Big Cypress National reserve is not a Class I area, a Class I analysis is required as per NPS due to sensitivity of the area. This is being required by NPS from other applicants also. The Class I analysis will include: i) air quality analysis; ii) total sulfate and nitrate deposition analysis; and iii) visibility analysis.

Please let me know if I captured our discussion accurately. If not, please comment and I will incorporate those.

#### **Thanks**

Arijit Pakrasi, Ph.D., P.E. Senior Consultant Shaw Environmental, Inc. 2790 Mosside Boulevard Monroeville, PA 15146

Ph: 412 858 3921 Fax: 412 372 8968

email: arijit.pakrasi@shawgrp.com

From: Pakrasi, Arijit

Sent: Tuesday, May 22, 2007 3:54 PM

To: 'Nelson, Deborah'

Subject: RE:

Yes. I understand we will have to include that also.

#### Thanks

Arijit Pakrasi, Ph.D., P.E. Senior Consultant Shaw Environmental, Inc. 2790 Mosside Boulevard Monroeville, PA 15146

Ph: 412 858 3921 Fax: 412 372 8968

email: arijit.pakrasi@shawgrp.com

----Original Message----

From: Nelson, Deborah [mailto:Deborah.Nelson@dep.state.fl.us]

Sent: Tuesday, May 22, 2007 3:24 PM

To: Pakrasi, Arijit

Subject:

Arijit,

Please don't forget Biscayne in your analysis as well. You had already done it but it will have to be done again with the regulatory model. I didn't mention it since it was done in your original analysis but I wanted to clarify.

### Debbie

Debbie Nelson Meteorologist Air Permitting South 850-921-9537 deborah.nelson@dep.state.fl.us