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APPENDIX E

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April 30, 2009
File No. 09206059.05

Dept. of Environmental Protection
MAY 01 2009
Southwest District

Ms. Mara G. Nasca
Florida Department of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, Florida 33637-0926

Subject: Reduction of Surface Emissions Monitoring Frequency on the Closed Class III, Closed Unlined Class I/III, and Active Class III Landfills
North Central Landfill, Polk County, Florida
Facility ID No. 1050298

Dear Mara:

On behalf of the Polk County Solid Waste Division and Wheelabrator Ridge Energy, Inc., SCS Engineers is submitting notification that there have been no exceedances of the 500 parts per million (ppm) of methane concentration threshold on the Closed Class III, Closed Unlined Class I/III, and Active Class III Landfill areas at Polk County's North Central Landfill during the past five quarterly monitoring events. In a determination dated July 7, 2002, which is included as Attachment 1 to this letter, U.S. EPA determined that an annual methane surface monitoring frequency can be implemented at active Class III landfills if the following criteria and conditions are satisfied:

- No exceedances of the 500-parts per million (ppm) threshold have been detected during the most recent successive quarterly monitoring periods;
- A methane concentration threshold of 250 ppm, rather than 500 ppm, will be used as a trigger for reverting back to a quarterly methane surface monitoring frequency. However, corrective action will be required only when the concentration level exceeds 500 ppm.

Results from the past five quarterly surface emissions monitoring events are presented in Table 1. This table shows that there have been no detections of methane at concentrations of 250 ppm or greater on the Class III landfill areas. All surface emissions monitoring was performed in accordance with the site-specific Gas Collection and Control System (GCCS) Design Plan, the Title V Permit, and the requirements of 40 CFR 60.755(c) and (d) and 40 CFR 60, Appendix A, Method 21.

Table 1. Surface Emissions Monitoring Results for the Closed Class III, Closed Unlined Class I/III, and Active Class III Landfills

Monitoring Event	Dates of Monitoring	Number of Detections at or above 250 ppm
1st Quarter 2009	March 10, 2009	0
4th Quarter 2008	October 31, 2008	0
3rd Quarter 2008	September 26, 2008	0
2nd Quarter 2008	July 21, 2008	0
1st Quarter 2008	March 3 & 4, 2008	0

Since no monitored exceedances of the operational standard have been detected during the past five surface emissions monitoring events, Polk County will reduce the frequency of surface emissions monitoring on these landfill areas to an annual basis. The next round of monitoring for the Closed Class III, Closed Unlined Class I/III, and Active Class III Landfill areas will be in the first quarter of 2010. If methane concentrations greater than 250 ppm above background are recorded during the annual monitoring, quarterly monitoring will resume.

Please call Allan Choate of Polk County at (863) 284-4319 if you have any questions about this submittal or require additional information.

Sincerely,

No. 56065
4/30/09

David H. Penoyer, P.E.
Project Manager

C. Ed Hilton

C. Ed Hilton, Jr., P.E.
Vice President
SCS ENGINEERS

cc: Allan Choate, P.E., Polk County
Tom Brislin, Wheelabrator Ridge Energy, Inc.
Anton Svorinich, Wheelabrator Ridge Energy, Inc.
James Getting, P.E., Waste Management
Scott Lambert, SCS Field Services

ATTACHMENT 1

U.S. EPA Applicability Determination Dated July 7, 2002
(Control Number 0500115)

Appendix_D-3_ADI-SEM on ClassIIIl landfills

Control Number: 0500115

Category: NSPS
EPA Office: Region 4
Date: 06/07/2002
Title: Alternative Monitoring of Surface Methane
Recipient: Rhodes, Howard L.
Author: Neeley, R. Douglas
Comments:
Subparts:

Part 60	III	SOCMI Air Oxidation Units
Part 60	NNN	SOCMI Distillation Operations
Part 60	WWW	Municipal Solid Waste Landfills

References: 60.756(f)
60.755(c)
60.13(i)
60.755(c)(4)

Abstract:

Q: Does EPA approve a proposed alternative surface methane concentration monitoring frequency, under 40 CFR part 60, subpart WWW, for a Class III area at the North County Resource Recovery Facility operated by the Solid Waste Authority of Palm Beach County, Florida?

A: Yes. EPA approves this alternative under NSPS subpart WWW because methane generation rates in the Class III area are expected to be low given the types of waste (construction demolition debris, trash, paper, and glass) placed there, and because no methane was detected during five successive quarterly monitoring periods. However, as this landfill is still active, the condition for this approval is that a methane concentration of 250 ppm, rather than 500 ppm, will be used as a trigger for reverting back to a quarterly methane surface monitoring frequency.

Letter:

Howard L. Rhodes, Director
Division of Air Resources Management
FL Department of Environmental Protection
Mail Station 5500
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Mr. Rhodes,

The purpose of this letter is to provide you with comments regarding an alternative monitoring proposal submitted to the U.S. Environmental Protection Agency (EPA) Region 4 in the enclosed February 5, 2002, letter from the Solid Waste Authority (SWA) of Palm Beach County. In its letter, the SWA proposed a reduction in the frequency of methane surface monitoring conducted on the Class

III landfill at its North County Resource Recovery Facility (NCRRF). This landfill is subject to 40 CFR Part 60, Subpart WWW (standards of Performance for Municipal Solid Waste Landfills), and SWA requested approval for an annual methane surface monitoring frequency as an alternative to the quarterly monitoring frequency required under 40 CFR 60.756(f). Based upon our review of

this request, an annual monitoring frequency for the class III landfill at the NCRRF would be acceptable provided that the methane concentration during the annual screening does not exceed 250 parts per million (ppm). Details regarding the proposal and the basis for our determination are provided in the

remainder of this letter.

Both a Class I and a Class III landfill are located at the NCRRF. The Class I landfill typically receives garbage, municipal solid waste incinerator ash, and other non-hazardous wastes. Construction demolition debris, trash, asbestos, paper, and glass are sent to the Class III landfill which is prohibited from accepting putrescible household waste. Based upon the types of wastes received, the Class III landfill is expected to generate less gas than the Class I landfill. Under the provisions in 40 CFR 60.756(f), methane surface concentrations must be monitored on a quarterly basis, and under the provisions of 40 CFR 60.755(c), corrective action must be taken in the methane surface concentration detected during these quarterly checks is 500 ppm or more above the background concentration. 40 CFR 60.756(f) also has a provision that allows owners and operators of closed landfills to reduce the methane surface monitoring frequency to an annual basis if no readings of 500 ppm or more are detected during three consecutive quarterly monitoring periods.

No methane has been detected during five consecutive quarterly surface checks in the Class III landfills at the NCRRF, and based upon these results, the SWA has requested approval to conduct future methane surface monitoring on an annual basis. Under this proposal, the monitoring would revert to a quarterly frequency if a methane reading of more than 500 ppm is detected during any of the annual surface monitoring checks. Since the Class III landfill at the NCRRF has not been closed, it does not qualify for a reduced monitoring frequency under the provisions in 40 CFR 60.756(f). An alternative monitoring frequency can, however, be approved under provisions in 40 CFR 60.13(i), and the authority to approve alternatives of this type has been delegated to the EPA Regional Offices.

The fact that no methane has been detected during any of the five quarters of monitoring conducted in the Class III landfill at the NCRRF is consistent with the expectation that the types of waste received will have low gas generation rates. Since there is no reason to expect that there will be any abrupt changes in the Class III landfill's gas generation rate, the SWA request for approval of an annual frequency for methane surface monitoring is acceptable to the EPA Region 4. One condition for approval of this reduced monitoring frequency, however, is that a methane concentration of 250 ppm, rather than 500 ppm, must be used as the trigger for reverting back to a quarterly methane surface monitoring frequency.

One reason for using a lower threshold for resumption of a quarterly monitoring schedule for the Class III landfill at the NCRRF is that no methane has been detected during any of the five quarters of monitoring conducted thus far. Based upon the results of the previous monitoring, a methane concentration reading of 250 ppm or more above background during any future monitoring would indicate a significant change in the condition of the Class III landfill, and a change of this magnitude would justify the resolution of quarterly monitoring frequency. A second reason to use a lower threshold for resumption of a quarterly monitoring schedule for the Class III landfill at the NCRRF is that this landfill is still active. Because it is active, gas generation rates may vary more than they would for closed landfills for which 500 ppm is used as the threshold for reduced monitoring under the provisions in 40 CFR 60.756(f). The possibility that gas generation rates will be more variable in an active landfill than they will be in a closed landfill justifies the use of a lower threshold for a reduced monitoring frequency in the Class III landfill at the

NCRRF.

Although the 250 ppm concentration level used as the threshold for a reduction in the methane surface monitoring frequency in the Class III landfill at the NCRRF will be lower than the 500 ppm concentration level used for closed landfills under the provisions in 40 CFR 60.756(f), the 500 ppm methane concentration used as a trigger for corrective action under the provisions in 40 CFR 60.755(c)(4) would also apply to the Class III landfill at the NCRRF. Therefore, quarterly monitoring will be required if the methane concentration levels exceeds 250 ppm, but corrective action will be required only when the concentration level exceeds 500 ppm.

If you have any questions about the issues addressed in this letter, please contact Mr. David McNeal of the EPA Region 4 staff at (404) 562-9102.

Sincerely,

R. Douglas Neeley
Chief
Air Toxics and Monitoring Branch
Air, Pesticides and Toxics
Management Division