

INTEROFFICE MEMORANDUM

Date: 19-Mar-1999 12:08pm
From: Joseph Kahn TAL
KAHN_J
Dept: Air Resources Management
Tel No: 850/921-9519

To: Marc Bruner (mcbruner@swa.org@PMDf@EPIC66)

Subject: Re: Comments on draft permit - PSD-FL-108(D)

Marc,

Thanks for the comments. The intent to issue should go out early next week. I made the changes you suggested in comments 2 and 3.

Regarding the emissions unit numbering, the EU numbers are assigned by our data management system, ARMS. There is little flexibility in the system to allow for changing these numbers. Currently ARMS shows four emissions units for your facility: EU 001 and 002 are the RDF boilers, and 003 and 004 are for the LF gas systems. I did add a reference to the EUs in the permit modification because I forgot it the first time. The third sentence of the first paragraph now reads, "The modification is to upgrade the blower motors for each landfill gas flare (emissions units 003 and 004) from a permitted flow rate of 900 scfm to a permitted flow rate of 1800 scfm."

When the Title V permit is issued, there may be some change in the numbering but I'm going to leave them as is for this permitting action. (Because ARMS is designed to keep a history linked to each EU, to change the numbering the existing EUs 001 - 004 would have to be inactivated and the new numbers would start with 005, which might be more confusing.) The Title V permit should result in the final numbers for the entire facility.

Let me know if you have any questions about this. Thanks again for the comments.

-Joe

INTEROFFICE MEMORANDUM

Date: 18-Mar-1999 05:25pm
From: Marc Bruner
mcbruner@swa.org@PMDf@EPIC66
Dept:
Tel No:

To: 'Joe Kahn' (kahn_j@A1@DER)

Subject: Comments on draft permit - PSD-FL-108(D)

Dear Joe:

I thought that since this message will be a brief one, that email will be preferable to regular mail. Thank you for the opportunity to review the draft permit. Authority staff and consultants have reviewed the draft documents, and in general we have no major concerns. There are several items that we would like you to consider, to correct small errors or to clarify certain items. Specifically these items include:

1. Technical Evaluation - Section 3. Project Description. The flare units are identified as emissions units number 3 and 4. They were numbered units 1 and 2 in the application, and I believe they are combined as Unit 17 in the Title V application currently under review. This comment provides no specific suggestion for a numbering convention for the flares, but simply suggests that we select a numbering convention that can address these different numbering systems.
2. Technical Evaluation - Section 6.1 - The fourth sentence in this paragraph includes a citation to 40 CFR 60.8. This citation refers to performance tests. 40 CFR 60.18 refers to performance requirements for flares, and may be the more appropriate reference.
3. Modification Letter - Condition 4 - Reporting Requirements - This is numbered incorrectly and should be Condition 5.

These are the only comments we have. Once again, thank you for the chance to review the draft.

Very truly yours,
Marc Bruner



Camp Dresser & McKee Inc.

consulting
engineering
construction
operations

1601 Belvedere Road, Suite 211 South
West Palm Beach, Florida 33406
Tel: 561 689-3336 Fax: 561 689-9713

RECEIVED
JAN 19 1999
BUREAU OF
AIR REGULATION

January 14, 1999

Mr. Joseph Kahn, P.E.
New Source Review Section
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJECT: Solid Waste Authority of Palm Beach County
North County Resource Recovery Facility Site Class I & III Landfills
DEP File No. 0990234-002-AC (PSD-FL-108(B))
Landfill Gas System Modifications Air Permit Application
Response to Request for Additional Information

Dear Mr. Kahn:

On behalf of the Solid Waste Authority (SWA) of Palm Beach County, Camp Dresser and McKee Inc. (CDM), is providing the following information in response to your request, dated October 20, 1998. We appreciate your help in going over your request for additional information with us on November 13th, and with Dr. Marc Bruner of the SWA on November 16th. The clarification you provided has assisted the SWA in decision making about air permitting for the ultimate build-out of the Class I and III Landfills' gas collection systems.

As you know, the permit application is for changing out the blowers in each of the two flares, one for the Class I collection system, and one for the Class III collection system. The new blowers will increase the gas flow rate capacity of each flare from 900 scfm to 1,800 scfm. This increase will allow the existing flares to operate at their maximum capacity, but this increase will not be enough to accommodate all of the gas expected at build-out of the landfill. Substantial landfill gas collection system expansions, including the addition of other control devices, will be needed by the time the capacities of both landfills are reached, currently expected in about the year 2023. The SWA would like to request that the DEP proceed with the current permit application for an incremental increase in flare emissions with the understanding that the SWA's next air permit application for these landfill gas systems, in a few years, will be for ultimate build-out.

The responses below are in the order of the requests for information in your October 20th letter. Each request is paraphrased (not repeated verbatim), and followed with a response.

Mr. Joseph Kahn
January 14, 1999
Page 2

Comment No. 1:

The permit application appears to avoid PSD review because the future emissions do not appear to have been calculated for the ultimate capacity of the landfills. Are the emissions in the application representative of the maximum emission rate based on ultimate landfill capacities at closure? In what year will maximum emissions occur? Will another flow rate increase be requested to accommodate future expansions? In 1996, the 900-scfm flow rate was projected to last until 2004, but the current incremental request is only two years later. This looks like the project is being segmented to avoid major modification PSD review. Please provide a calculation of future potential minus existing actual emissions, with future potential being based on the ultimate capacity of the landfill. Please summarize assumptions used to calculate methane emissions.

Response :

The Class I & III Landfills are currently expected to reach capacity in the year 2023, based on the 1998 Landfill Depletion Model, enclosed as Attachment A. This current application is for change-out of the existing flare blower motors only, to reach the existing flares' physical maximum flow rate. This change will increase each flare's maximum flow rate from 900 scfm to 1,800 scfm. The Class I Landfill is currently operating at about 700 to 1,100 scfm now. The Class III Landfill is producing less, roughly 300 to 660 scfm. Based on the acceptance rate projections in Attachment A, and the U.S. EPA's Landfill Air Emissions Estimation Model runs shown in Attachment B, it is estimated that the Class I Landfill would reach 1,800 scfm in the year 2003. In 2023, the flow rate in the Class I Landfill could be up to 4,600 scfm. For the Class III Landfill, the modeling shows that 1,800 scfm may provide sufficient capacity for its ultimate build-out.

The blower motor replacement is urgently needed (and has already been performed), and we would like to proceed with this request for an incremental increase in gas flow. The SWA will return to the DEP with another modification request. However, the SWA plans to have the next modification be for conditions at maximum landfill capacity.

This minor modification application is not intended to, and does not, circumvent the PSD process. EPA's guidance (NSR Workshop Manual, Section III. B. 1., p. A.36, October 1990) for evaluating multiple minor projects to determine if they should have been considered a single project suggests that the reviewer consider first whether the projects could be proposed over a relatively short period of time, and second, whether the changes could be considered part of a single project. The example the guidance gives for "relatively short period of time" is "a few months." The currently proposed incremental change is expected to provide enough capacity in the system to last, without additional increases, for about four years.

Mr. Joseph Kahn
January 14, 1999
Page 3

Because the Class I Landfill's current landfill gas flow rate is about 1,000 scfm, its future potential minus existing actual flow rate is 800 scfm. For the Class III Landfill, with an existing flow rate of about 600 scfm, the future potential minus existing actual flow rate is 1,200 scfm. (Note that "actual" flow is based on one year of data, rather than the two required by DEP rules. This is because data has only been collected for the last year. Also, because landfill gas flow is increasing exponentially, the most recent data is most representative of existing gas flow.) Application correction pages included as Attachment C, show calculation of emissions for each flare based on these future potential minus existing actual net flow rate increases.

Comment No. 2:

The sulfur calculations in Appendix D, Part 4 do not match those in Section H of the forms for the Class III Landfill. The proposed sulfur inlet rate is half the project SO₂ emission rate, and three times the permit limit. Provide the existing actual emissions in comparison with future potential emissions.

Response:

The sulfur calculations in Appendix D, Part 4, are based on actual measured sulfur inlet concentrations in 1996 and 1997. The calculation in the forms is maximum potential to emit for the proposed increases, based on higher flow rates and higher estimated sulfur inlet concentrations in the future. Please note that we have requested that the sulfur limit condition be removed from the original permit because there appears to be no basis in the regulations for having it.

The proposed SO₂ emissions increase of 20.6 tpy for both flares is well below the PSD significant increase level of 40 tpy. A "synthetic minor" permit limit for SO₂ is not necessary. The detailed calculation of future potential emissions minus existing actual emissions is provided in Attachment C.

Comment No. 3:

Please use the EPA Landfill Gas Model to predict NMOC emissions.

Response:

The EPA Landfill Air Emissions Estimation Model calculation of NMOC emissions is presented in Attachment B. The calculation of future potential emissions minus existing actual emissions is provided in the application replacement pages in Attachment C. This calculation is based on the same assumed NMOC concentration in the landfill gas (595 ppm)

Mr. Joseph Kahn
January 14, 1999
Page 4

that is used in the model, but on a 800 scfm gas flow rate to the Class I flare and a 1,200 scfm increase to the Class III flare, the maximum potential minus existing actual incremental flow increases to each flare.

Comment No. 4:

Please correct the typographical error in the calculation of the SO₂ emission rate for emission unit 002.

Response:

This correction has been included in the replacement pages in Attachment C.

Comment No 5:

Explain why the methodology for SO₂ emissions and VOC emissions are different.

Response:

They are both based on assumed inlet concentrations to the flare. The VOCs are assumed to be destroyed by 98%, and the sulfur is assumed to pass through the flare without destruction, but oxidize with O₂ to form SO₂. The correction pages in Attachment C have additional lines added to the VOC emissions calculation to show this more clearly.

Additionally and in reference to the gas flow record keeping issue discussed in our telephone conference on January 7, 1999, please note that the SWA is currently and will continue performing a daily inspection of the gas system and report monthly gas flow data based on a resettable totalizer. The totalizer is reset at the first day of each month. The monthly average is calculated by dividing total gas flow by the number of operating hours in each month to obtain a cubic feet per hour (CFH) value. This CFH value is then divided by sixty to obtain cubic feet per minute (CFM) value which is used for compliance determination. Furthermore, the SWA uses a stripchart recorder to qualify and backup the totalizer data. The monthly data is tabulated and submitted to FDEP in the annual report. A copy of the previous annual report is included in Attachment D for your information.

Mr. Joseph Kahn
January 14, 1999
Page 5

SWA and Camp Dresser & McKee (CDM) appreciate DEP's assistance on this project. If there are any questions regarding this application, please contact our office.

Very truly yours,

CAMP DRESSER & MCKEE INC.



Alex H. Makled, P.E., DEE
Florida License No. 45935

Enclosures

File: 2678-23062-042.PA.FDEP

cc: Mr. Isidore Goldman, P.E., Southeast District DEP (w/enclosure)
Mr. Jack Mesojedec, SWA (w/enclosure)
Mr. Robert Worobel, SWA (w/enclosure)
Mr. Richard Statom, SWA (w/enclosure)



December 22, 1998

YOUR PARTNER FOR
SOLID WASTE SOLUTIONS

Department of Environmental Protection
P.O. Box 15425
West Palm Beach, FL 33416

Attn: Tom Tittle

Re: Your Letter Dated Dec 14, 1998
Notification of Potential Permit Violation PSD-FL-108(B)
Landfill Gas Collection and Control System

Dear Mr. Tittle:

The following information is provided in response to your letter to Don Lockhart, and my subsequent telephone discussion with Terri Long. I hope it will clarify the situation.

In regard to the flow rate at the Class I flare, Alex Makled of the firm Camp, Dresser and McKee submitted a letter to DEP dated June 5, 1996 (copy attached). In that letter, it was indicated that the maximum flow rate of the flare units is 1050, with a design point of 900 cfm. DEP, in a response dated June 25, 1996, agreed with our rationale on this issue. This may have created a misunderstanding, in that we interpreted this agreement meant that we could operate our flares to their maximum flow rate of 1050 cfm, instead of the design point of 900 cfm.


In this same June 5 letter the Authority indicates that it is our intent to monitor gas flow on a quarterly basis, rather than monthly, and that this data will be summarized in the annual operating report. Again, the Department agreed with this rationale. This may have again created an unclear situation. If this rationale means that the gas flows are evaluated as quarterly averages, then we may have gone over the 900 cfm design point threshold for two quarters, rather than six individual months. Also, if compliance could be interpreted as an annual average, summarized in the annual operating report, the average for the year to date is in fact under 900 cfm.

Based on the information in these two letters, a situation appears to have developed in which the Authority has believed it was approved to operate the flare system in a fashion different than the Department believed to be the case. As the Authority interpreted the response, to the June 5 1996 letter, we have been operating in accord with the clarification and confirmation provided by the Department. As you note in your letter, the Authority currently has an application under review with the Department to increase the capacity of each flare to 1800 cfm. The approval of this pending application should resolve the issues of uncertainty which currently exist.

Until the pending application is processed, the Authority will inform the Department if the average flow rate for the Class I flare (total gas flow divided by actual operating hours) exceeds 900 cfm in any month. It is important to note that the objective of the operation of the flare system is to manage NMOC's and odors from the landfill, and our efforts will continue to focus on maximizing this control in compliance with our permit limitations.

If you have any questions, please contact me at (561) 969-9164 EXT. 5607.

Very truly yours,

A handwritten signature in black ink that reads "Marc C. Bruner". The signature is written in a cursive style with a large, prominent "M" and "B".

Marc C. Bruner,
Director of Planning & Environmental Programs

Attachments

Cc: Don Lockhart, SWA (w/o attach.)
John Booth, SWA (w/o attach.)
Bob Worobel, SWA (w/o attach.)
Joe Kahn, FDEP, Tallahassee
Joe Lurix, FDEP, Solid Waste, WPB
Terri Long, FDEP, Air, WPB
PBCHD, Air Section



environmental
services

1601 Belvedere Road, Suite 211 South
West Palm Beach, Florida 33406
Tel: 407 689-3336 Fax: 407 689-9713

June 5, 1996

Mr. Howard L. Rhodes
Director
Division of Air Resources Management
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Subject: Solid Waste Authority of Palm Beach County
North County Resource Recovery Facility (NCRRF)
PSD-FL-108(B)

ATTENTION: Ms. Teresa Heron

Dear Mr. Rhodes:

We are writing this letter on behalf of the Solid Waste Authority of Palm Beach County (SWA) seeking clarification/confirmation of our understanding of the new specific conditions added to the North County Resource Recovery Facility (NCRRF) permit No. PSD-FL-108(B). These conditions were added by the Department as an amendment to include the construction and operation of the gas collection and control system for the NCRRF landfills. The permit amendment was issued by the Department on February 20, 1996 (copy attached).

For ease of reference and review, we have repeated each of the new conditions in this letter as shown in bold, followed by our response.

Specific Condition No. 1. **This source shall be allowed to operate continuously (i.e., 8760 hours/year).**

Response: No comments.

Specific Condition No. 2. **The utility flare system shall be designed, manufactured, and operated according to U.S. Environmental Protection Agency criteria as specified in 40 CFR 60.18, in order to ensure high efficiency combustion of landfill gas at the 98% level of destruction of total hydrocarbons, with a flame temperature of at or above 1400° F.**

Response: As indicated in our permit application submittal, the proposed utility flare system is designed in accordance with the U.S. Environmental Protection Agency (EPA) established criteria for open flares, 40 CFR 60.18, with an approximate

Mr. Howard L. Rhodes
June 5, 1996
Page 2

operating temperature of 1400° F. Obviously the flame temperature readings will vary depending on the point of measurement.

Specific Condition No. 3. There shall be no visible emissions from any individual flare, except for periods not to exceed a total of five minutes during any two consecutive hours at which visible emissions can be up to 20 percent opacity.

Response: No comments.

Specific Condition No. 4. For inventory purposes, the pollutant emission rates from each of the flare systems are:

Pollutant	Emission Factors	Pounds/Hour	Tons/Year
NO _x	0.07 lb/million Btu	1.67	7.33
VOC	36 lb/million ft ³	1.94	8.51
SO ₂	0.002 lb/scf	1.67	1.33
PM ₁₀	1.69 E-05 lb/scf	0.91	3.99
CO	0.37 lb/million Btu	9.10	39.87

Response: We have two comments on this condition as follows:

Comment No. 1: It is our understanding that these emission rates are included in this permit as design data and will be used for informational purposes only during the operation of the landfill gas collection and control system.

Comment No. 2: In reference to the VOC emission rate, please note that based on the pollutant emission calculations included in the permit application, the estimated uncontrolled (prior to destruction in the flare system) VOC emission from each unit is 97.2 lb/hour. Based on a 98% destruction efficiency, this number will be reduced to 1.94 lb/hour. Additionally, please note that the SO₂ emission rate included in the above table under the tons/year column should be 7.33 tons/year and not 1.33 tons/year.

Mr. Howard L. Rhodes
June 5, 1996
Page 3

Specific Condition No. 5. This source shall meet the applicable requirements of 40 CFR Subpart WWW, NSPS for Municipal Solid Waste Landfill upon adoption by the Florida Department of Environmental Protection; 40 CFR 60.18, General Control Device Requirements; Chapters 62-209 through 297 and 62-4, F.A.C.

Response: The system is designed to meet the proposed NSPS regulations. However, since the NSPS regulations have not been officially adopted by FDEP yet, and because they may be modified by FDEP before final adoption, we cannot assure the Department, at this time, that the installed system meets a set of regulations that are not yet in effect.

Specific Condition No. 6. Compliance with the visible emissions standard shall be determined using EPA Method 22 and shall be for the duration of 2 hours. Such tests shall be conducted within 60 days of completion of construction and initial startup operation, and annually thereafter. The required visible emissions test report shall also contain the gas flow rate from the extraction wells and the flare temperature data.

Response: It is SWA's intent to conduct the visible emission tests using EPA Method 22 within 60 days of final completion of construction of the entire system (Class I and Class III systems). It is also SWA's intent to include the gas flow rate from the well fields measured at the flare stations and the flare temperature data in the test reports. These test reports will be submitted to the Department after the initial start up and annually thereafter.

Specific Condition No. 7. Sulfur content of the input gas to any flare shall not exceed 0.65 pounds per hour.

Response: We requested that this condition be deleted during our review of the draft permit, so it is unclear why this condition was included. Please note that we have little to no control over the amount of sulfur in the landfill gas and the primary purpose of installing the flare system is to destroy hazardous air pollutants that may be emitted from the landfills. The proposed flare system is designed to meet EPA emission standards for landfill gas disposal using a utility flare. We respectfully request that this specific condition be deleted from the permit.

Mr. Howard L. Rhodes
June 5, 1996
Page 4

Specific Condition No. 8. An analysis shall be performed to determine the sulfur content of input gas to the flare, by the American Society for Testing and Materials (ASTM) test method, D 1072-90, prior to any flare startup. Additional tests shall be performed on a yearly basis, and results included as part of the facility's annual operating report.

Response: Please see response to Specific Condition No 7.

Specific Condition No. 9. Pursuant to Rule 62-296.320 (2), F.A.C., Objectionable odors caused by these sources are prohibited.

Response: No comments.

Specific Condition No. 10. Total volumetric flow to any flare in the system shall be limited to 900 scfm. Total volumetric flow to the aggregate of the two flares shall be limited to 1800 scfm.

Response: Based on the landfill gas model generation rates included in the permit application, the inlet flow to each flare unit is expected to be around 900 scfm in the year 2004. Also, please note that each of the proposed flare units has a design point of 900 scfm with a maximum flow rate of 1050 scfm.

Specific Condition No. 11. Proper devices shall be installed at all wellheads, and at the flare station for 1) gas flow volume and gas pressure measurements, 2) gas composition analysis, 3) gas temperature and flame temperature recording, and 4) flow control, prior to the collection and disposal of the active landfill gases. Such devices shall be properly calibrated and maintained at all times, according to manufacturer's written instructions. The checking and recording of the gas flow, temperature, and pressure, shall be performed on a quarterly basis for all wells and on a monthly basis for the flare station.

The permittee shall keep a hard copy of the gas extraction monitoring and analysis data, as well as instrumentation history records, on site at all times. The data shall be summarized and included as part of the facility's annual operating report. These sources shall comply with recording and record keeping requirements specified in 40 CFR 60 Subpart WWW, NSPS for Municipal Solid Waste Landfills.

Mr. Howard L. Rhodes
June 5, 1996
Page 5

Response:

As indicated in the landfill gas system permit application and construction drawings, the system design includes provisions for gas sampling ports, pressure taps, temperature reading and flow control devices at each wellhead; and a flow sensor for flow measurement and thermocouples for temperature monitoring at the flare station. Also, each wellhead assembly is fitted with a set of mating flanges which are set up to accommodate future installation of orifice plates to determine flow rates. The installed devices/features will be calibrated and maintained at all times in accordance with the manufacturer's written instructions.

Currently, it is the intent of SWA to monitor gas flow, temperature, pressure, and composition at the flare station on a quarterly basis. Flare flame temperature will be monitored using the skid installed thermocouples as indicated on the project design/shop drawings. SWA will keep hard copy of this monitoring data on site at all times. This data will be summarized and included as part of the facility's annual operating report.

Additionally, it is the intent of SWA to comply with any additional future record keeping and monitoring requirements that may be added as a result of FDEP's adoption of the NSPS regulations for municipal solid waste landfills, provided that such requirements can be met without major modifications to the installed landfill gas system.

Specific Condition No. 12. The net heating value of the input gas shall be 200 Btu/scf or greater. Compliance with this parameter shall be determined by methodology specified in paragraph F of 40 CFR 60.18. Samples shall be taken, and results reported annually.

Response: No comments.

Specific Condition No. 13. Actual exit velocity of each flare shall be calculated and reported on an annual basis, using methods specified in paragraph F of 40 CFR 60.18.

Response: No comments.

Specific Condition No. 14. The Southeast District office shall be given at least 15 days written notice prior to compliance testing.

Response: SWA will give the Southeast District office 15 days written

Mr. Howard L. Rhodes
June 5, 1996
Page 6

notice prior to compliance testing. At the present time, the flare system for the class I landfill is scheduled to be delivered to the site on June 17, 1996 with system start-up is tentatively scheduled to begin later that week.

Specific Condition No. 15. Prior to placing the flare in service, the pilot gas for the flare shall be fired by propane at 25 scfh (standard cubic feet per hour). The pilot light is not required when the flame is sustained by the landfill gas alone.

Response: Prior to placing the flare in service, SWA will fire the pilot gas for the flares by propane in accordance with the design criteria which is at a rate of approximately 25 scfh.

We respectfully request that the Department review and concur with our proposed plan to comply with the permit amendment conditions. If you have any questions, please do not hesitate to call.

Very truly yours,

CAMP DRESSER & McKEE INC.



Alex H. Makled, P.E.

AHM/mjm
Enclosures

File: 2678-08-PM2[4]

cc: John D. Booth, SWA
Robert F. Worobel, SWA
Marc C. Bruner, Ph.D., SWA

bcc: D. Munksgaard
J. Curro
D. Strobridge



Department of Environmental Protection

07-09-96P12:17 RCVD

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

June 25, 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Alex H. Makled, P.E.
Camp Dresser & McKee Inc.
1601 Belvedere Road, Suite 211 South
West Palm Beach, Florida 33406

RE: Solid Waste Authority of Palm Beach County
PSD-FL-108(B) Issued February 20, 1996

Dear Mr. Makled:

The Department is in receipt of your letter dated June 5, 1996 requesting clarification and confirmation of the new specific conditions added to the North County Resource Recovery Facility (NCRRF), permit No. PSD-FL-108(B). The Department has reviewed your letter and has the following comments:

Specific Condition No. 2. The Department agrees with your rationale. However as the condition states, the flame temperature shall be at a minimum of 1400 degrees Fahrenheit.

Specific Condition No. 4. The Department agrees with your rationale. The typographical error of 1.33 tons SO₂/year should be corrected. An emission limit of 7.33 tons SO₂/year shall be changed in the Title V permit.

Specific Condition No. 7. The Department will not delete this condition. This condition provides the Department with reasonable assurance that the operation of this flare system will not cause or contribute to a violation of the sulfur dioxide (SO₂) ambient air quality standard and/or that the proposed SO₂ emissions will not exceed the threshold level requiring review pursuant to Prevention of Significant Deterioration (PSD). This condition is a standard condition for recently issued permits for landfill operations.

Specific Condition No. 8. See Specific Condition No. 7.

The Department agrees with your rationale on Specific Conditions 5, 6, 10, 11, 14, and 15. If you have any questions, please call Ms. Teresa Heron at (904)488-1344.

Sincerely,

A. A. Linero, Administrator
New Source Review Section
Bureau of Air Regulation

cc: Isidore Goldman, SED
Buck Oven., DEP

AAL/th/t



Department of Environmental Protection

Lawton Chiles
Governor

Southeast District
P.O. Box 15425
West Palm Beach, Florida 33416

Virginia B. Wetherell
Secretary

DEC 14 1998

Mr. Donald Lockhart, Executive Director
Solid Waste Authority of Palm Beach
7501 Jog Road
West Palm Beach, Florida 33412

RE: Notification of Potential Permit Violation PSD-FL-108(B)
Landfill Gas Collection and Control System

Dear Mr. Lockhart:

Specific Condition 10 of the above referenced permit, issued February 20, 1996, states the following:
"Total volumetric flow to any flare in the system shall be limited to 900 scfm. Total volumetric flow to the aggregate of the two flares shall be limited to 1800 scfm."

Specific Condition 11 of the above referenced permit states in part, "...The checking and recording of the gas flow, temperature, and pressure shall be performed on a quarterly basis for all wells and on a monthly basis for the flare station."

The Department has reviewed the 1998 monthly flow rates (requested by the Department) for the Class I and Class III flare stations. For the months of February, April, May, June, July and August, 1998, the average monthly flow rate for the Class I flare station exceeded 900 scfm.

The Department is currently reviewing an application (received October, 1998) for PSD modification to increase the capacity of the flare stations to 1800 scfm each. As this application would be a corrective action required by the Department as a result of an enforcement case, the Department, at this time, is withholding enforcement action pending the issuance of the permit modification.

Please be advised, under Permit PSD-FL-108(A), General Condition 8 states the following:

"8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance."

Page 2

The Department can find no record of having received the timely notification required under this condition in reference to the exceedance of the Class I flare flow rates.

If you have any questions, please contact Ms. Terri Long at telephone number (561) 681-6625.

Sincerely,

A handwritten signature in black ink, appearing to read "Tom Tittle". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Tom Tittle
Air Compliance/Enforcement Supervisor

cc: Joe Kahn, FDEP, Tallahassee
Joe Lurix, FDEP, Solid Waste, WPB
PBCHD, Air Section



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

October 20, 1998

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Donald L. Lockhart
Executive Director
Solid Waste Authority of Palm Beach Co.
7501 North Jog Road
West Palm Beach, Florida 33412-2414

Re: DEP File No. 0990234-002-AC (PSD-FL-108(B))
Landfill Gas System Modifications

Dear Mr. Lockhart:

The Bureau of Air Regulation reviewed the above application received on September 21st and found that additional information is required. The completeness items are listed below.

1. The application is for the incremental emissions increase from expansion of the class I and III landfills and the application compares that increase to the PSD significance levels for a major modification to a major facility for the various pollutants. However, this approach appears to avoid PSD review because the future emissions do not appear to have been calculated for the ultimate capacity of the landfills. For both emissions units 001 and 002, are the calculated methane and NMOC, and CO emissions in the application representative of the maximum emission rate based on ultimate landfill capacities at closure? In what year do maximum emissions occur? (Note that in a letter from CDM to the Department dated June 5, 1996, the 900 scfm flare inlet flow rate was projected to be sufficient until the year 2004.) Will another flow rate increase be required to accommodate future landfill expansions? If the application is not based on maximum emissions, please revise the emission calculations for maximum emissions. In order to assess PSD applicability for VOC (NMOC) and CO, please provide a comparison of past actual to future potential emissions, with future potential based on maximum potential emissions. In addition to responses above, please summarize the assumptions used to obtain landfill methane emissions.

2. Regarding removal of the sulfur permit limit, the calculations shown for sulfur to the flare for the class III landfill in Appendix D, part 4 of the application do not match the calculations for SO₂ emissions in section H for emissions unit 002 of the application. Using the assumptions provided in section H for emissions unit 002, the calculated sulfur to the class III flare is 1.8 lb/hr (exactly half of the projected SO₂ emission rate from this flare, and almost three times the existing permit limit). The application describes that the increase in SO₂ emissions from these projects is below the PSD significance level for a major modification to a major facility, but the application does not identify what is the maximum potential to emit for SO₂ at maximum landfill capacity, as compared with past actual emissions. Since removal of this permit limit will increase potential to emit for SO₂, please perform this past actual to future potential emissions comparison.

3. The EPA landfill gas emissions model will predict the NMOC emission rate in Mg/yr. Please compare the emissions predicted by the model with the rates calculated in the application.

Mr. Donald L. Lockhart

Page 2 of 2

October 20, 1998

4. There is a typographical error in the emission calculation for SO₂ emissions for emissions unit 002. The factor of 2 to convert from the MW of sulfur to the MW of SO₂, is not shown in the calculations. However, the result, 14271 kg/yr, includes this factor. You may wish to update your copies of the application to correct this typographical error.

5. The emission calculation methodology for SO₂ emissions for emissions unit 002 seems applicable to VOC emissions for emissions units 001 and 002. Please comment on why different methods were used to estimate emissions for these two pollutants.

Permit applicants are advised that Rule 62-4.055, F.A.C. now requires applicants to respond to requests for information within 90 days. If there are any questions, please call me at 850/921-9519.

Sincerely,



Joseph Kahn, P.E.

New Source Review Section

/jk

cc: Isidore Goldman, SED
Jim Stormer, PBCHD
Alex Makled, P.E., CDM

Z 333 612 485

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 33412-2414

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