

# Department of Environmental Protection

Jeb Bush Governor South District P.O. Box 2549 Fort Myers, Florida 33902-2549

May 3, 2001

David B. Struhs Secretary

John W. Wong, District Manager Waste Management Inc. of Florida Post Office Box 990400 Naples, Florida 34116

Re: Collier County - AP

Draft Construction Permit 0210051-004 -AC Draft Title V Revision 0210051-005-AV Collier County/Naples Landfill Flare Upgrade

Dear Mr. Wong:

Please consider this in response to your letter of April 17th to David Knowles P.E. regarding the referenced Intent to Issue.

We must confess to being somewhat taken aback by your letter and the wide range of significance those comments and requests contained. Given the existing circumstances, it was rather surprising that the only objection letter we received would be from your office. Discussions with our staff left us unaware of any significant problems other than administrative corrections, which obviously would not require a major effort on either party. However, based upon our recent discussion, apparently we have differing views as to what is and what is not significant in nature.

As we discussed, it is unfortunate that we could not have met on these issues prior to your letter. While we can certainly understand Waste Management's desire to protect their interests, we are disappointed that these concerns could not have been addressed previously. Especially so, as we had the permit ready to go out the day the commenting period ended. Obviously, that is no longer be the case, based upon the content and/or the items requested within your letter. Equally obvious, is that this will cause a delay with regard to construction of the flare system.

Nevertheless, the following determinations are presented for your consideration in answer to your comments. We have outlined our position and our rationale in this reply. As your letter arrived within the commenting period, we must infer that you wish to keep your options open with regard to legal issues. By copy of this letter we are notifying Tallahassee OGC in order that they may be aware of this situation.

The following replies to your letter of April 17th and addresses the comments and requests contained therein regarding changes to the Draft Construction permit and the Title V revision.

#### **Cover Letter**

Page 1 - Addressee....

This will be changed

"More Protection, Less Process"

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John W. Wong, District Manager Waste Management Inc. of Florida May 3, 2001
Page Two

Page 1, Paragraph 2, Line 5: Delete "adequately treat the hydrogen sulfide gas now being produced by the landfill." In its place, substitute "manage increased landfill gas flow rates, as well as to treat the hydrogen sulfide gas contained in the landfill gas."

We can do this on the cover letter only. This change may be made on the cover letter without republication.

#### **Intent to Issue**

Paragraph 3, Line 2 as above – Delete "adequately treat the hydrogen sulfide gas... In its place, substitute "manage increased landfill gas... etc."

We can not change this on the "Intent" as it has already been issued and published. We can, however, make this change on the final permit. If this change is desired on the Intent to Issue, it will need to be republished. This will result in a delay of at least 14 days after publication of the revised public notice.

#### **Public Notice of Intent to Issue**

Page 1, Paragraph 2, Line 3: As above – Delete "adequately treat the sulfide gas... In its place, substitute "manage increased landfill gas...etc."

Same comments as above. We can do this on the final permit. If this change is desired on the Public Notice of Intent to Issue, the Intent to Issue will need to be republished.

#### Draft Permit No. 0210051-004-AC

Page 1, Paragraph 2, Line 3: As above – Delete "adequately treat the sulfide gas... In its place substitute "manage increased landfill gas...etc."

We can do this on the final permit. This change may be made without republication.

Page 2, Paragraph 1: Insert the words "maximum expected" before "carbon monoxide", "nitrogen dioxide", and "sulfur dioxide".

We submit that the most appropriate phrase is "potential to emit" as it is referenced in our rules. We will therefore insert same in those places.

Specific Condition No. 2: Change the phrase "and the sulfur content shall not exceed 3634 ppmv" to "at a sulfur content of an annual average of 3634 ppmv."

Our understanding is that this language and the resulting limits were inserted as a result of your consultant's modeling data. It was then reviewed and approved specifically by our Tallahassee office; in order to comply with the provisions of Prevention of Significant Deterioration (PSD.) Therefore, we do not feel it would be appropriate for this office to alter those findings.

John W. Wong, District Manager Waste Management Inc. of Florida May 3, 2001 Page Three

#### Specific Condition No. 5: Insert "by a chart recorder or" after the word "recorded."

Documentation of the landfill gas flow to the flare needs to be monitored and recorded on a daily basis as reasonable assurance of compliance with Specific Conditions 1 & 33. For clarification we will add to the end of the sentence for Specific Condition No. 5 "as a reasonable assurance that compliance with Specific Conditions Nos. 1 & 33 is being achieved."

#### Specific Condition No. 6: Add the following sentences...

That will be changed as requested

Specific Condition No. 13: In accordance with industry standards... (you desire an alternative to Method 3C).

Method 3C is required by federal rule -40 CFR 60,60.753(3)(1). Consequently, this office can not change this procedure. Alternatively, you may make a formal request for an alternate sampling procedure (ASP) to the Bureau of Air Monitoring in Tallahassee.

Operation Permit Revision No. 02110051 - 005-AV

Cover Letter, Paragraph 1

Delete the phrase "adequately treat the hydrogen sulfide...etc."

In this instance, we can and will make that change.

Page 4, Condition No. 7: Insert the words "Not federally enforceable" at the beginning of the sentence, as was done for Conditions 2 and 6.

Conditions 2 and 6 are not interchangeable with No. 7. This item can not be changed due to consistency with EPA requirements.

Section III, Subsection A.

Paragraph 1, Line 5: The maximum flow rate should be changed to 3,000 scfm to correspond with the capacity of the new flare.

Section III A must remain in place as long as the present flare is operational and in use; hence this language. Please refer to the last sentence of the 3rd paragraph in our Intent to Issue and Specific Condition A.O. which clarifies this point.

#### Condition A.1.: Change the flow rate to 3,000 scfm...

As explained above. This language will reflect the new flow rate upon satisfaction of the conditions of Construction Permit No. 0210051-004-AC.

John W. Wong, District Manager Waste Management Inc. of Florida May 3, 2001
Page Four

#### Section III, Subsection B.

Condition B.1. - Change the process rate to 1,577 million cubic feet...

As explained above. This change will be made when the new flare begins operation. This language will reflect the new flow rate upon satisfaction of the conditions of Construction Permit No. 0210051-004-AC.

Condition B.3. – Delete this condition. This reference to the NSPS applies only to NSPS-regulated sites that have not yet triggered the requirement for installation of a LFG control system. Therefore, it does not apply to Collier County.

The NSPS regulation refers to the requirement for calculating the NMOC (Non Methane Organic Compounds) emission rate for a landfill that shows the actual accepted solid waste rate. Therefore, it is pertinent that this condition remains in the permit.

Condition B.4. – Delete this condition. The reference also applies only to NSPS-regulated sites that have not yet triggered the requirement for installation of a LFG control system. Therefore, it does not apply to the Collier County Landfill.

Please refer to Section(3) of the Condition. This must stay in place until the new flare is placed into operation. Once the new flare is in place the facility will be exempt, as stated in Section (3).

#### Section III, Subsection D.

Page 20, Paragraph 3 – Insert the words "maximum expected" before "carbon monoxide", "nitrogen oxide" and "sulfur dioxide". The emission levels...

As stated previously, this language will be changed to "potential to emit" to conform with Departmental rules.

Condition D.1 – Change the phrase "and the sulfur content shall not exceed 3634 ppmv" to "at a sulfur content annual average of 3634. WMIF believes that the intent of this condition...

Again, please refer to our comments on Specific Condition No. 2 of the Draft Permit. As the limits reflect modeling data analysis prepared and approved by our Tallahassee staff in concert with your consultants, we do not feel it would be appropriate for this office to alter those results.

#### Condition D.5. - Add the word "quarterly" after "and also monitored".

We will make this change, and also change Specific Condition No.6 of the Construction Permit No. 020051-004- AC for consistency. For clarification to Specific Condition No. 5, the following language from the Construction Permit will be added after the first sentence. "Readings of the landfill gas integrating flow meter shall be monitored and recorded in a logbook on a daily basis as a reasonable assurance that compliance with Specific Condition Nos. 1 & 33 is being achieved."

John W. Wong, District Manager Waste Management Inc. of Florida May 3, 2001 Page Five

Condition D.6. – Add the following sentences at the end of the existing text. "U.S. EPA Method 16 (GC/FPD) will be acceptable for analyzing for reduced sulfur Compounds. Net heat content may be calculated based on methane concentration Readings obtained from calibrated handheld field instruments."

We will make this change and also change Specific Condition No. 6 of the Construction Permit for consistency.

Condition D.9. – In accordance with industry-standard practices, WMIF suggests that routine monitoring with a handheld landfill gas instrument, such as the Landtec GEM-500, is an acceptable alternative to Method 3C analysis for sampling At each monitoring location.

Please note our previous comments on Method 3C. Again, this is a federal requirement by rule. Unless we receive EPA approval for this alternative, this procedure will remain in place.

#### Appendix CP-1

Item No. 1 – On March 23, 2001, WMIF submitted a compliance plan schedule to FDEP for incorporation into this permit. Because this condition has already been met, WMIF requests that it be deleted.

We will delete this item.

Item No. 2 – The work listed under this item has already been completed and documented to FDEP. Therefore, WMIF requests that this item be deleted from the Compliance Plan.

We will delete this item.

It remains our hope that we can resolve this matter promptly. If you have any questions please contact us at (941) 332-6975.

Sincerely,

Ronald D. Blackburn

District Air Program Administrator

#### RDB/jw

cc: Mr. Tom Olliff

Mr. James Mudd, P.E.

Mr. George Yilmaz

Mr. Randy Holcomb

Ms. Carolyn McGreedy

Mr. Doug Whitehead

Mr. Raymond Dever, P.E.

Mr. Bruno Ferraro

Ms. Martha Nebelsik, OGC - Tallahassee

Mr. Joe Kahn, P.E., DEP - Tallahassee

Mr. Philip Barbaccia, DEP - Fort Myers

# Florida Department of **Environmental Protection**

To:

Ron Blackburn

South District Office

Through: Clair Fancy, P.E.

Bureau of Air Regulation

From:

Joseph Kahn, P.E. XV Emissions Monitoring Section

Date:

February 16, 2001

Subject: PSD Applicability Determination for Naples Landfill Flare Upgrade

Alex Meng and I have reviewed the information submitted in support of the request for PSD exemption for the Naples Landfill flare upgrade project. The information included estimated emissions increases for SO<sub>2</sub>, NOx and CO from the project, as well as the initial and revised modeling analyses for SO<sub>2</sub> impacts. (The applicant's consultant's calculations show that only the emission increase for SO<sub>2</sub> exceeds the PSD significance criteria.) The revised modeling analysis, presented with a letter from Grove Scientific and Engineering dated February 9, 2001, used ISCST3 and the meteorological data for Ft. Myers from 1987 to 1991, and was based on a maximum short term SO<sub>2</sub> emission rate of 13.5 grams per second (107 pounds per hour). The physical height of the flare was assumed to be 20.8 meters on a foundation that is 4 feet above ground level, for a total flare stack height of 22 meters above grade. The location of the flare will be outside the area of downwash influence from the landfill cells. The applicant used a method developed by the Texas Natural Resource Conservation Commission to calculate an effective stack diameter for the flare so that the flare could be modeled as a point source in the ISCST model.

The modeling analysis predicted maximum 3-hour, 24-hour and annual average concentrations of 16.5, 6.1 and 0.6 micrograms per cubic meter, respectively. These impacts are very low in comparison to the respective PSD Class II increments of 512, 91 and 20 micrograms per cubic meter, and the respective ambient air quality standards of 1300, 260 and 60 micrograms per cubic meter. Visibility impacts are not an issue for this project. The analysis shows that the proposed project qualifies for exemption from the PSD preconstruction review requirements as a pollution control project pursuant to Rule 62-212.400(2)(a)2.c., F.A.C.

The district office should include conditions in the construction permit that require compliance with the assumptions used in the modeling analysis. The height above grade and the location of the flare should be specified to match the assumptions used in the analysis. The short-term SO<sub>2</sub> emission rate, or the equivalent sulfur content of the landfill gas, should be limited to the emission rate used in the model, with an appropriate compliance mechanism specified such as routine sampling and analysis of the landfill gas. The flow rate of gas to the flare should be monitored and recorded on a regular and frequent basis to ensure that the flow rate does not exceed the design flow rate of 3000 SCFM.

Please let me know if you have any questions about this determination.



# Department of Environmental Protection

Jeb Bush Governor South District P.O. Box 2549 Fort Myers, Florida 33902-2549

David B. Struhs Secretary

ECENORIE SOUTH

February 26, 2001

Tom Olliff, Collier County Administrator Collier County Government Complex 3301 E. Tamiami Trail Naples, Florida 34112

Re: Collier Co. – AP

Naples Landfill – Flare upgrade

Permit No. 02/210051-AC

New Source Performance Standards

South Florida EMA

Dear Mr. Ollif:

We have received notification from our Tallahassee office that the Flare Upgrade has been evaluated. Based upon the modeling data, this project will be exempt from Prevention of Significant Deterioration (PSD) as long as it is constructed and operated in accordance with the methodology proposed. Therefore, we will be proceeding with the approval of the reference permit.

In light of our mutual efforts to address problems at the Naples Landfill, we also thought it appropriate to share with you our concerns regarding past operations which are documented in the New Source Performance Standards Annual Report submitted to our office for that facility.

In the above referenced report, apparent violations were noted in various areas; such as lack of continuos monitoring, and excessive wellhead oxygen and nitrogen concentrations. In essence, as we seek to incorporate the new flare system currently being processed, it seems prudent to review past practices and investigate operational protocol to avoid recurrence of these problems.

We certainly do not wish to distract ongoing efforts toward construction of the new system. However, we feel it may be advisable for our technical staff to meet with your consultants or any other representatives which you feel may be appropriate to discuss these issues. Additionally, given the other critical factors with regard to long term planning, we feel it most timely to address these concerns in context with those actions anticipated to provide long term solutions for the County's waste management program.

Tom Olliff, Collier County Administrator February 26, 2001 Page Two

Please feel free to contact us at your earliest convenience with your thoughts on this matter.

Sincerely,

Ronald D. Blackburn

District Air Program Administrator

### RDB/jw

cc: G. Randall Holcomb
John Wong
Ray Devers, P.E.
George Yilmaz
James Mudd, P.E.
Phil Barbaccia, DEP, South District
David H. Penoyer, P.E.
Joe Kahn, P.E.





P.O. Box 990400 Naples, Florida 34116 (941) 455-8062 (941) 455-0853 Fax

March 23, 2001

Mr. Ronald Blackburn
District Air Program Administrator
Department of Environmental Protection
South District
P.O. Box 2549
Ft. Myers, Florida 33902-2549

RE: Collier County - AP

Collier County Landfill / Flare Upgrade

Permit No. 02710051 – AC Southwest Coast EMA

Dear Mr. Blackburn:

Waste Management Inc. of Florida (WMIF) is providing the attached Compliance Plan Schedule prepared by SCS Engineers for your review.

If you have any questions, please contact me.

Sincerely,

John W. Wong District Manager

Attachment: Compliance Plan Schedule prepared by SCS Engineers

Cc: Joe Kahn, FDEP

W/Attachments W/Attachments

Philip Barbaccia, FDEP

W/Attachments W/Attachments

David Penoyer, SCS G. George Yilmaz, CCG - Solid Waste Director

W/Attachments

#### **BEST AVAILABLE COPY**

Environmental Consultants

3012 U.S. Highway 301 North Suite 700 Tampa, FL 33619-2242 813 621-0080 FAX 813 623-6757

#### SCS ENGINEERS

March 23, 2001 File No. 09198073.07

Mr. John W. Wong Waste Management, Inc. of Florida P.O. Box 990400 Naples, Florida 34116

Subject:

Compliance Plan Schedule

Collier County Landfill Gas System Flare Upgrade Construction Application 02210051-004-AC

Dear John:

Based on conversations with Florida Department of Environmental Protection (FDEP) staff on March 12 and 21, 2001, SCS Engineers (SCS) has compiled the following compliance schedule for the proposed new landfill gas flare at the Naples Landfill in Collier County. Upon issuance of the final Title V permit (after the required public and U.S. EFA review and comment periods), the new flare will be permitted under an air construction permit, which is valid for one year. After this one-year period, the flare will be subject to the conditions of the operating permit. However, in order for the flare to be operated under the construction permit, certain compliance milestones must be met. Therefore, upon receiving the construction permit, Waste Management, Inc. of Florida (WMIF) will neet the following milestones, which make up the compliance plan schedule:

- Construction completed Within three months of construction permit issuance.
- System Start-up Within six months of construction permit issuance.
- Compliance Testing At least 90 days before expiration of the construction permit.
- Submittal of Compliance Test Report Within 60 days of completion of the compliance test.

In addition, per Rule 62-213.400(2), F.A.C., WMIF must notify FDEF within 15 days after the specified date of completion of each milestone. The notification must include a description of the achievement of compliance, of progress achieved, requirements met, requirements not met, corrective measures adopted and an explanation of any measures not met by the completion date for the milestone. All reports must be accompanied by a certification, signed and sealed by a responsible official, in accordance with Rule 62-213.420(4), F.A.C.

## **BEST AVAILABLE COPY**

Mr. John Wong March 23, 2001 Page 2

Please forward this compliance schedule to FDEP, in order for it to be incorporated into the draft permit. Please call either of us if you have any questions or need additional information.

Sincerely,

David H. Penoyer, P.E.

Project Engineer

Raymond J. Dever, P.E., D.E.E.

Vice President SCS ENGINEERS

cc: G. Randall Holcomb, WM Carolyn McCreedy, WM