February 10, 1999

Mr. Scott Sheplak Administrator, Title V Section Florida Department of Env. Protection Twin Towers Office Building Tallahassee, Florida 32299-2400



YOUR PARTNER FOR SOLID WASTE SOLUTIONS

# RECEIVED

FEB 1 1 1999

BUREAU OF AIR REGULATION

Subject: North County Resource Recovery Facility - Planned Title V Permit Revisions

Dear Mr. Sheplak:

In response to your letter to the Solid Waste Authority of Palm Beach County (SWA) dated January 19, 1999, the SWA is submitting this preliminary description of the needed changes to our Title V permit application for the subject facility. The SWA anticipates submittal of complete Title V application revisions to FDEP within 2 months of the date of this letter.

Our consultant, HDR Engineering, Inc., represented by Mr. Ed Liebsch, and Mr. Michael Halpin of your staff agreed to this schedule and the information to be provided in this preliminary response letter in a phone conversation on 12/28/99.

Attachment 1 of this letter provides a tabular listing of the emission units included in the original NCRRF Title V permit application, and briefly describes the types of corrections, including new applicable requirements, which will be part of the revised application.

The SWA appreciates the opportunity to make the needed corrections to the application so that the draft Title V permit which is issued for public comment will be as accurate as possible. We look forward to working with your staff to resolve any questions that may arise during this process.

Feel free to call Marc Bruner with the Solid Waste Authority at (561) 640-4000 ext 5607, or Ed Liebsch with HDR at (612) 591-5400 ext 5452 if you have any questions regarding this matter.

Sincerely,

Donald L. Lockhart Executive Director

Attachment

cc: Mark Hammond, SWA
John Booth, SWA
Marc Bruner, SWA
Neal Poteet, HDR

Michael P. Halpin, P.E., FDEP

### ATTACHMENT 1

The initial NCRRF Title V permit application identifies 17 emission units-anticipated revisions are as follows:

1.RDF Fired Boiler #1 Re CA rec 2. RDF Fired Boiler #2 Re	place 40 CFR Subpart with Subpart Cb quirements. place 40 CFR Subpart Cb quirements. place 40 CFR Subpart with Subpart Cb	Authority for Status  Action Description  HDR to recalculate some pollutants, revise forms.  HDR to recalculate some
CA rec 2. RDF Fired Boiler #2 Re	with Subpart Cb quirements. place 40 CFR Subpart with Subpart Cb	HDR to recalculate some pollutants, revise forms.
2. RDF Fired Boiler #2 Re	place 40 CFR Subpart with Subpart Cb	
2. RDF Fired Boiler #2 Re	place 40 CFR Subpart with Subpart Cb	HDR to recalculate some
1 11 1	with Subpart Cb	HDR to recalculate some
	-	TIDIC TO TOCATORIATE SUITE
		pollutants, revise forms.
	quirements.	
_	significant, possibly	Rules 62-213.430(6)(b), and.
	empt	62-210.300(3)(a)(22) F.A.C
	significant, possibly	Rules 62-213.430(6)(b), and.
······································	empt	62-210.300(3)(a)(22) F.A.C
_	significant, possibly	Rules 62-213.430(6)(b), and.
	empt	62-210.300(3)(a)(22) F.A.C
·	significant, possibly	Rules 62-213.430(6)(b), and.
	empt	62-210.300(3)(a)(22) F.A.C
	significant	Rule 62-213.430(6)(b), F.A.C.
	significant	Rule 62-213.430(6)(b), F.A.C.
	significant significant	Rule 62-213.430(6)(b), F.A.C.
	rrently not used, but	Rule 62-213.430(6)(b), F.A.C. HDR to remove from
	uld not emit anyway -	application form, Rule 62-
	nted to ash silo.	213.430(6)(b), F.A.C.
	significant	210.100(0)(0), 1.11.0.
	t process-remove from	HDR to remove from
	arce list.	application form.
13. RDF Storage Dust Exc	empt	Rules 62-213.430(6)(b), and.
Collection	-	62-210.300(3)(a)(22) F.A.C
14. MRF Sol	id Waste Authority Says	HDR to remove from
	s no longer in service-	application form.
	nove from source list.	
15. Auto Spray Booth Exe	empt	Rule 62-210.300(3)(a)(23),
		F.A.C.
	significant	Rules 62-213.430(6)(b) F.A.C
	d Subpart WWW	Solid Waste Authority to
rec	quirements and revise	coordinate any appropriate
per	r PSD application.	flare constr. Permit
		revisions with CDM (e.g
		CO rate, gas moisture)
* 18. Ferrous Processing Ins	significant	Primary Purpose is
Facility		product recovery, Rule 62-
		213.430(6)(b), F.A.C.

<sup>\*</sup> Note #18 not a part of original application.



# Department of Environmental Protection

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

Virginia B. Wetherell Secretary

January 19, 1999

Mr. Donald L. Lockhart
Executive Director
Solid Waste Authority of Palm Beach County
North County Resource Recovery Facility
6501 North Jog Road
West Palm Beach, Florida 33412

Re:

Initial Title V Permit Application

North County Resource Recovery Facility

Dear Mr. Lockhart:

Thank you for the timely submittal of your initial Title V Air Operation Permit application for the North County Resource Recovery Facility. The Department will begin reviewing this application in the near future. Before we begin the review, we would like to extend the opportunity for you to examine the <u>List of Applicable Regulations</u> provided in your application. This is not a letter of incompletion.

The promulgation of the New Source Performance Standards (NSPS) 40 CFR 60, Subparts Cb, Cc, Ea, and Eb has occurred after the submittal of your initial Title V Air Operation Permit application. Based upon a review of the State's 111(d) Implementation Plan, these subparts may have applicability to your facility and they were not included in the List of Applicable Regulations. Please provide this office with updated listings of all applicable regulations, an updated statement of compliance, and the appropriate certifications, so that the permit shield can be extended to include the appropriate NSPS subpart. Should you wish to review the aforementioned State 111(d) Plan for your facility, please log on to the Florida Department of Environmental Protection's website at the following address:

http://www2.dep.state.fl.us/air/enhancd/regulate/project/rej.htm and click on the "Municipal Waste Combustors (MWC) Rule", specifically the "State Plan" link.

Please submit this to my attention at the above letterhead address. If you have any other questions, please contact Michael P. Halpin, P.E. at 850/921-9530.

Sincerely,

Scott M. Sheplak, P.E.

Administrator Title V Section



RECEIVED

OCT 01 1999

**September 30, 1999** 

**BUREAU OF AIR REGULATION** 

Mr. Scott Sheplak
Professional Engineer Administrator
Title V Section, Air Resources Division
Florida Department of Environmental Protection
2600 Blair Stone Road MS 5510
Tallahassee, FL 32399-2400

Re: Solid Waste Authority of Palm Beach County - North County Resource Recovery Facility Title V Permit Application, submitted June 12, 1996.

Dear Mr. Sheplak,

The Solid Waste Authority of Palm Beach County (SWA) submitted a Title V permit application to the Department in June 1996 for the North County Resource Recovery Facility (NCRRF). Since that time the SWA has modified and expanded the landfill gas collection/flare system and received modifications to the PSD air permit for that work.

In order to assure that the proposed Title V permit for the SWA accurately reflects the facilities at the NCRRF; the SWA is submitting this amended permit application to the Department.

Enclosed are the following items for the amended Title V permit application prepared by HDR Engineering.

- One diskette containing the electronic submittal file generated by the ELSA
   1.3c permit software,
- One copy of the signed Professional Engineer certification form,
- One copy of the signed Responsible Official certification form,
- One copy of the signed Compliance Statement, and
- Four copies of the Supplemental Information (Appendices) to the permit application.

During preparation of the amended Title V permit application, two issues arose that the SWA would like to bring to the attention of the Department for resolution when the permit is issued.

The first issue relates to the diluent monitors installed on the two combustion units. PSD - FL - 108A, the permit under which the units are currently operating, specifies the use of an oxygen monitor as the diluent monitor for the units. In a letter to Mr. Tom Tittle of the Department dated November 17, 1992 (attached), the SWA proposed to install carbon dioxide monitors to be used as the diluent monitors for the combustion units. No response was received from the Department and the CO<sub>2</sub> monitors were installed and have been used for reporting compliance since that time. Although the SWA has retained the oxygen monitors, the preference is to use the CO<sub>2</sub> monitors, which have been used for years for compliance demonstration with tacit approval by the Department. The requirements of 40 CFR Part 60, Subpart Cb allows the use of either O<sub>2</sub> or CO<sub>2</sub> monitors, therefore, the SWA requests that the Title V permit include only the requirement to operate and maintain the CO<sub>2</sub> monitors.

The second issue relates to the applicability of Title V permitting for Class III landfills. The SWA has recently received information from the Department relating to the applicability of Subpart WWW to Class III landfills. The attached emails indicate that although our current permit for the landfills (PSD -FL - 108D) does not exempt the Class III landfill from Subpart WWW, it may in fact not be subject to that subpart. In order to insure that the Title V permit application is complete, the Class III landfill is included, however, the SWA is asking for a determination from the Department on the applicability of Title V to Class III landfills. If it is determined that Title V does not apply to Class III landfills, just as Subpart WWW regulations do not apply, we request that the permit reflect that determination and exclude the Class III landfill and its landfill gas collection system from regulation.

We wish to work closely with you and your staff in the writing of this permit. To that end we request that a preliminary draft be transmitted to us when it is developed in order to allow for discussion and comment. We will make every effort to be timely with our comments in order to expedite the process and develop a permit that is acceptable to both the Department and the SWA.

If you have any questions or comments, please do not hesitate to contact me.

Sincerely,

Richard A. Statom Assistant Director

**Environmental Programs** 

Cc. D. Lockhart, SWA w/o attachments

- M. Hammond, SWA w/o attachments
- J. Booth, SWA w/o attachments
- J. Mesojedec, SWA w/o attachments
- B. Worobel, SWA w/o attachments
- K. Dunbar, HDR w/o attachments
- D. Pelham, HDR w/o attachments
- T. Long, FDEP, WPB w/o attachments

## SOLID WASTE AUTHORITY

### OF PALM BEACH COUNTY

7501 North Jog Road West Palm Beach, Florida 33412 Telephone (407) 640-4000



# FILE COPY

November 17, 1992

Tom Tittle
Environmental Manager, Air Programs
Florida Department of Environmental Regulation
1900 S. Congress Ave. Suite A
West Palm Beach, Florida 33406

Re: NCRRF Continuous Emission Monitors

Dear Mr. Tittle,

The Solid Waste Authority has completed an extensive review of the continuous emission monitoring (CEM) requirements set forth in the EPA guidelines for existing municipal waste combustors under 40 CFR, Part 60, Subpart Ca and how these requirements effect the present CEM system at the NCRRF. Based on our understanding of these Federal requirements it will be necessary to modify the CEM system currently in use at the North County Resource Recovery Facility. These modifications will exceed the minimum standards in the permit. Additionally, even though not required in the permit, the modifications will allow the SWA to achieve compliance with NSPS for CEMs.

After consulting with Enviorplan, Inc. the original CEM System supplier, the following modifications are proposed in order to comply with the current EPA monitoring and reporting.

1) Add(4) Milton Roy Model 3300 CO2 analyzers

<u>Purpose:</u> Modify the existing wet based measurement system to report emission concentrations on an equivalent dry volume basis corrected to 7% O2. (This would be accomplished using the conversion calculations presented in Attachment 1).

2) Add (2) TECO Model 43A SO2 Analyzers

<u>Purpose:</u> Provide dedicated SO2 analyzers at the inlet and outlet locations of each unit. This would improve the system response time and calibration accuracy by deleting the existing time - shared SO2 system.

3) Modify the (2) existing TE $\infty$  Model 48  $\infty$  analyzers to add dual range capability.

<u>Purpose:</u> To satisfy the performance specification requirements under 40 CFR, Part 60, appendix B (PS-4A).

4) Upgrade the existing CEMDAS computer hardware and software to accommodate the required CEM system measurement and reporting requirements.

In order to assure that the proposed modifications constitute compliance with the permit PSD-FL-108A, the SWA request that the Department review the proposed modifications and contact us by December 1, 1992 if there are any problems.

The SWA has tentative plans to proceed with the implementation of these proposed modifications to the CEM system in February, 1993. However, in order to meet this schedule a formal equipment order needs to be placed with Enviorplan, Inc. by December.

If you have any questions or comments, please do not hesitate to contact me.

Sincerely,

Richard A. Statom Assistant Director

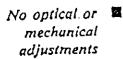
Environmental Programs

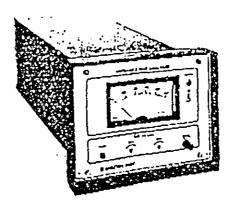
RAS/ncrrfcm2

cc: Marc Bruner, SWA Bob Worobel, SWA John Booth, SWA Bill Arvan, B&W Doug Burnham, B&W

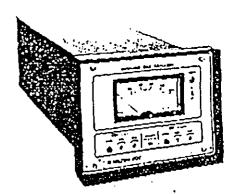
# INFRARED GAS ANALYZER

### MODELS 3300 & 3400





Model 3300 Single Component Dual Range



Model 3400 Dual Component Single Range

Single beam optics

The simplicity of single beam optics design — made possible by the Microfl Detector - results in highly stable, reliable analyzers of unmatched analyti performance, requiring no optical adjustments and only the simple maintenance.

### Analog or 🖪 Jigital Readout

The analyzer uses a technique based on the infrared absorption characteristics of gases to measure gas concentration. Use of an efficient single beam design results in good long-term stability.

Modular 🖪 construction for easy maintenance

A single beam of infrared energy is modulated and passed through a sample cell containing the cas to be measured. The beam emerges attenuated by the amount of energy absorbed by the gas(es) in the sample. Changes in the concentration of the gas(es) result in changes of the intensity of the beam. The remaining energy in the beam is passed serially through two cavillas of an infrared detector, a massflow sensor filted with gas of the type to be measureu.

Low sensitivity to vibration

> Changes in the intensity of the beam change the pressure differential between the cavities and consequently the balance of the electrical bridge in the detector circuit.

> Electronic processing and linearization of the imbalance signal are used to generate an electrical output signal linearly proportional to the concentration of the gas measured.

Combustion Elliclency Burners & Boilers (CO, CO<sub>2</sub>) Commercial Ovens (CO, CO<sub>2</sub>)

Controlled Atmospheres Heat treating (CO, CO2, CH4) Greenhouses (CO<sub>2</sub>) Fermentation (CO<sub>2</sub>) Air Liquification (CO<sub>2</sub>)

Process Chemical Gas Analysis

Respiration Studies Single Breath Lung Diffusion (CC

Stack Gases

Total Organic Carbon Analysis (TO-

### Specilication

M ANALYSIS METHOD:

Non-Dispersive Infrared (NDIR)

COMPONENTS MEASURED:

CO. CO2, CH4, and HC (n-Hexane equivalent)

SENSITIVITY:

Minimum of 400 ppm full scale

AMBIENT HUMIDITY:

Less than 90% RH

■ REPEATABILITY:

Less than 0.5% of full scale

RESPONSE TIME: Selectable

90% of full scale in less than 1 sec.

SAMPLE FLOW RATE:

0.5 · 2 liter/min.

E ZERO DRIFT:

Less than 1% of full scale per 24 hours

E SPAN DRIFT:

Less than 1% of full scale per 24 hours

■ LINEARIZER (Standard):

± 2% of full scale

■ NOISE:

Less than 0.5% of full scale

DISPLAY:

Analog meter (Standard)

Digital Display (Optional)

CALIBRATION CHECK:

Electronic - Push Button

AMBIENT TEMPERATURE RANGE:

23 - 113 °F (-5 - 45 °C)

SAMPLE TEMPERATURE RANGE:

32 · 122 °F (0 · 50 °C)

WARM-UP TIME:

Approximately 2 hours

ANALOG OUTPUTS:

.01, 0.1, 1.0, VDC simultaneous

4-20 mA DC

RANGES:

2 Ranges 1 Component (model 3300)

1 Range 2 Components (model 3400)

400 ppm to 100%

Range Ratio · Maximum 5.1

FITTINGS:

1/4 In. NPT plpe

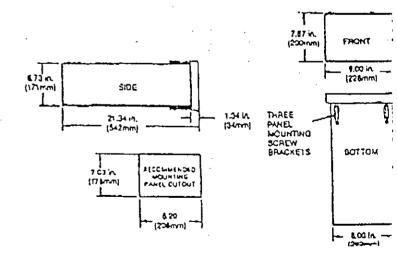
M POWER REQUIREMENTS:

115/230 (±10%) VAC @ 50/60 Hz, 30 watts

■ WEIGHT:

25 lbs. (11 kg)

**■** DIMENSIONS:



# **會 MILTON ROY**

1238 West Grove Avenue, Orange, California 92665-4134 Telephone: (714) 974-5560 Fax: (714) 921-2531 3172712804

ENUIROPLAN INC INDY

668 PØ2 SEP 18 '92 13:19

# ATTACHMENT 1"

CEMDAS converts instantaneous pollutant concentrations in ppm to instantaneous concentrations, corrected to n% O2 dry basis, in ppm(cor) by the following equations. These equations are based on the 40 CFR Pt. 60, App. A, Meth. 20, 7, Equation 20-5, 20-1, 20-3 and 20-2 (7-1-90 edition) respectively.

### Equation 34

where the dry concentrations are replaced by wet concentrations. The two moisture corrections (Equation 20-1) cancel each other out. The  $x_{\rm CO2}$  is the correction factor for correcting data to n percent oxygen and calculated by Equation 35.

Equation 35

when = dry % 0z bose (ie: 7 % 0z dv)

where F is calculated by Equation 36.

3172712804

ENVIROPLAN INC INDY

668 PØ3 SEP 18 '92 13:20

Equation 36

where  $F_d$  and  $F_c$  are respectively the calculated Fd and Fc Factors and 0.209 is the fraction of the air that is oxygen.

From: Mary Jean Yon TAL 850/488-0300 [Mary.Jean.Yon@dep.state.fl.us]

Sent: Tuesday, September 28, 1999 8:36 AM

To: Marc Bruner ext. 4607

Cc: 'Terri Long (E-mail)'; Michael Hewett TAL; Chris McGuire TAL
Subject: Re: Subpart WWW landfill gas regs and Class III landfills

Marc:

Sorry to take so long getting back to you. Chris and I discussed your Class III/Landfill Gas question as we drove to Orlando last week. And the answer is...

We in Solid Waste do not consider Class III landfills to be affected by the Federal requirements for either the Clean Air Act or Subtitle D. Why, you ask? Because Class III's are defined as landfills that receive only those wastes not expected to produce a leachate which poses a threat to public health or the environment and they are specifically prohibited from accepting putrescible household waste. This is not to imply that Class III's run amok and have no regs governing them. Chapter 62-701 still rules but the Federal rules don't. Hopefully Mike Hewett will agree!

M.J.

From: Venkata Panchakarla TAL 850/488-0114

[Venkata.Panchakarla@dep.state.fl.us] Tuesday, September 28, 1999 11:01 AM

Sent: To:

Marc Bruner ext. 4607

Cc:

Michael Hewett TAL; Terri Long WPB; Mary Jean Yon TAL

Subject:

"Subpart WWW landfill regs and Class III landfills"

Dear Marc:

Hi How are you?

Mike forwrded me your mail and requested me to answer your questions.

Here is my two cents worth.

If you have any further questions, please feel free to contact me.

Warm regards,

Venkata:)

==========

>Mary Jean and Mike,

>

>This email message is in follow-up to my call to Mary Jean yesterday, trying >to make my message clearer, for I fear that I didn't explain it well. This >involves the interaction (or lack thereof) between Florida's landfill >classification system and EPA's landfill gas rules.

>

>The question in its most simple form is this: Do landfills that meet the >waste acceptance and operational criteria for Class III landfills in 62-701, >constitute municipal solid waste landfills according to the definition of 40 >CFR 60.751, and are they subject to the Federal Subpart WWW landfill gas >emissions control regulations? The Federal regulations have been adopted by >reference through 62-204.800. This question has come up through our LFG >system operations staff who have asked whether they have to comply with the >WWW requirements at the Class III landfill.

>

The answer in its most simple form is this:
If a landfill is permitted as a Class III landfill it is

If a landfill is permitted as a Class III landfill, it is not subject to the Landfill Rule (40 CFR 60 subparts Cc and WWW).

>Several other definitions or terms may come into play. The first is the >definition of Household Waste in 40 CFR 60.751, which is the same as 62-701. > Do Class III landfills accept what would meet this definition of Household >Waste?

>

A Class III landfill shall not accept putrescible household waste.

>The other term of concern is what constitutes "contiguous geographical >space" as used in the Federal definition of MSW landfill. Our Class I and >Class III landfills are on the same property, but are physically separated at >this point, although they will abut one another eventually.

>

Are these Class I and Class III cells of a landfill or are these Class I and Class III landfills individually permitted as such?

A landfill is considered a single landfill, if the cells are contiguous and under common ownership or control, even if a road or golf course seperates the cells.

>I decided to send this message to both of you since it overlaps both the solid >waste and air aspects of our facility, and provided a copy to Terri Long at >the Southeast District Office since she's the one tracking compliance at our >facility.

>I hope you can assist me in clarifying this question. Thanks for your help.

>Marc Bruner

From: Venkata Panchakarla TAL 850/488-0114

[Venkata.Panchakarla@dep.state.fl.us] Tuesday, September 28, 1999 11:27 AM

**Sent:** Tuesday, September 2 **To:** Marc Bruner ext. 4607

Cc: Michael Hewett TAL; Terri Long WPB; Mary Jean Yon TAL

Subject: Re: FWD: Re: Subpart WWW landfill gas regs and Class III landfills

### Dear Marc:

Hi, hope you have received my earlier reply. As explained in that and as stated below by Mary Jean, if a landfill is permitted as Class III landfill, it does not come under the purview of the Landfill Rule (40 CFR 60, Cc & WWW) since Class III landfills are not allowed to accept putrescible household waste. Hope this helps to clarify the matter. If you have any further questions regarding this issue, please do not hesitate to contact me. Thank you. Warm regards, Venkata:)

### >Marc:

> Sorry to take so long getting back to you. Chris and I discussed your Class >III/Landfill Gas question as we drove to Orlando last week. And the answer >is...

>

> We in Solid Waste do not consider Class III landfills to be affected by the >Federal requirements for either the Clean Air Act or Subtitle D. Why, you ask? >Because Class III's are defined as landfills that receive only those wastes not

>expected to produce a leachate which poses a threat to public health or the >environment and they are specifically prohibited from accepting putrescible >household waste. This is not to imply that Class III's run amok and have no >regs governing them. Chapter 62-701 still rules but the Federal rules don't. >Hopefully Mike Hewett will agree!

> M.J

From:

Marc Bruner ext. 4607

Sent:

Wednesday, September 22, 1999 4:03 PM

To:

'Mary Jean Yon (E-mail)'; 'Mike Hewett (E-mail)'

Cc:

'Terri Long (E-mail)'

Subject:

Subpart WWW landfill gas regs and Class III landfills

Mary Jean and Mike.

This email message is in follow-up to my call to Mary Jean yesterday, trying to make my message clearer, for I fear that I didn't explain it well. This involves the interaction (or lack thereof) between Florida's landfill classification system and EPA's landfill gas rules.

The question in its most simple form is this: Do landfills that meet the waste acceptance and operational criteria for Class III landfills in 62-701, constitute municipal solid waste landfills according to the definition of 40 CFR 60.751, and are they subject to the Federal Subpart WWW landfill gas emissions control regulations? The Federal regulations have been adopted by reference through 62-204.800. This question has come up through our LFG system operations staff who have asked whether they have to comply with the WWW requirements at the Class III landfill.

Several other definitions or terms may come into play. The first is the definition of Household Waste in 40 CFR 60.751, which is the same as 62-701. Do Class III landfills accept what would meet this definition of Household Waste? The other term of concern is what constitutes "contiguous geographical space" as used in the Federal definition of MSW landfill. Our Class I and Class III landfills are on the same property, but are physically separated at this point, although they will abut one another eventually.

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I hope you can assist me in clarifying this question. Thanks for your help.

Marc Bruner