

Governor

# **Environmental Protection**

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

Department of

David B. Struhs Secretary

Certified Mail -- Return Receipt Requested

October 22, 2001

Mr. John J. Gallagher County Administrator Pasco County Board of County Commissioners West Pasco Government Center, S-340 7530 Little Road New Port Richey, FL 34654

Re:

Title V Permit No. 1010056-002-AV

Pasco County Resource Recovery Facility

Dear Mr. Gallagher:

We are in receipt of your letter dated September 26, 2001 requesting a permit revision to the subject facility's Title V permit (1010056-002-AV), and a minor modification to construction permit No. PSD-FL-127. However, we must deem your application incomplete due to the following reasons:

- 1. Please submit your application using the proper Department form No. 62-210.900(1). The form is available on the Department's Internet web site: www.dep.state.fl.us/air. Only those pages reflecting the changes to your original Title V application need to be submitted. However, the submission needs to include the certification page with the signature of the Responsible Official of the facility.
- 2. Rule 62-4.050(3), F.A.C., requires that all original applications for a Department permit and requests for permit revisions must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature.

Please also note that Rule 62-4.055(1), F.A.C., requires a response to requests for information within 90 days. When we receive the above-mentioned items, we will continue processing your application. If you have questions, please contact Tom Cascio at 850/921-9526.

10/23/01 cc: Soft Steplak Peading File Marted 10/23/01

Scott M. Sheplak, P.E.

Administrator

Title V Section

10/3 Scott PK hardle



#### BOARD OF COUNTY COMMISSIONERS

### RECEIVED

DADE CITY LAND O' LAKES

(352) 521-4274 (813) 996-7341

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OCT 02 2001

BUREAU OF AIR REGULATION

COUNTY ADMINISTRATOR'S OFFICE WEST PASCO GOVERNMENT CENTER, S-340 7530 LITTLE ROAD

**NEW PORT RICHEY, FL 34654** 

September 26, 2001

Mr. Clair Fancy, P.E. Chief, Bureau of Air Regulation Florida Department of **Environmental Protection** 2600 Blair Stone Road Tallahassee, FL 32399-2400

RE:

Pasco County Resource Recovery Facility - Title V Air Operation Permit No. 1010056-002-AV and Permit No. PSD-FL-127 - Request for Permit Revisions

Dear Mr. Fancy:

Pursuant to the Department letter dated December 26, 2000, and Ogden Energy Group (now Covanta Energy Group) letter dated February 7, 2001, we request that the referenced permits be revised to remove the requirement to monitor the furnace temperature.

Both Title V Air Operation Permit No. 1010056-002-AV, Condition A.7.3.0. and Permit No. PSD-FL-127, Condition 1.c., require that furnace temperature be at least 1,800°F. The facility has relied on the furnace roof temperature correlation to demonstrate compliance since the facility began operation in 1991. As required by the Title V permit, the correlation report was submitted to the Department on November 16, 2000 for approval. By letter dated December 26, 2000, the Department did not approve this report.

With the establishment of the U.S. Environmental Protection Agency's (EPA) Good Combustion Practices (GCP) and the promulgation of Emission Guidelines for Municipal Waste Combustion Industries (Guidelines), the monitoring of furnace temperature is no longer necessary. Since the facility's current Title V permit contains conditions adequate to assure compliance with EPA's GCP and Guidelines, we believe that a revision to the permits to remove furnace temperature requirement is in order, and request that the Department modify both permits accordingly.

Mr. Clair Fancy, P.E. September 26, 2001

Please feel free to contact Mr. John Power, Solid Waste Facility Manager, at (727) 856-0119, if you have any questions.

Sincerely,

hn J. Øallagher County Administrator

JJG/DSB/ltr/s092601

#### **Enclosures**

V. Ta, Covanta Energy of Pasco, 14230 Hays Road, Spring Hill, FL 34610
J. Gorrie, Camp Dresser & McKee Inc., 1715 N. Westshore Blvd., S-875, Tampa, FL 33607
Douglas S. Bramlett, Assistant County Administrator (Utilities Services) CC:

John Power, Solid Waste Facility Manager

Page 2 of 2





## Department of Environmental Protection

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

David B. Struhs Secretary

December 26, 2000

Mr. Leon Brasowski Vice President, Permitting Ogden Energy Group, Inc. 40 Lane Road Fairfield, N.J. 07007-2515

Re:

Title V Air Operation Permit 1010056-002-AV and Permit PSD-FL-127

Pasco County Resource Recovery Facility

Dear Mr. Brasowski:

We have carefully reviewed the materials that you submitted regarding compliance with condition A.7.3.0 Operating Temperature as it applies to the correlation and calibration of a roof thermocouple as a surrogate for combustion zone temperature at the Pasco County Resource Recovery Facility under the above referenced permits. We have a number of concerns:

- 1. Your transmittal letter (November 16, 2000) refers to a document entitled Demonstration of 1800 Degree Combustion Temperature and Development of Furnace Roof Thermocouple Correlation bearing the date May 24, 1991 and the signature and professional seal of William R. Crellin, dated November 7, 2000. The Department relies heavily upon the training, experience and integrity of professional engineers and other professional persons who supply data and calculations for permitting work. It does not appear that Mr. Crellin was licensed as a professional engineer at the time of this study, or that he was he a part of the testing team, either as a technician or as an observer.
- 2. The May 24, 1991 study as submitted, is flawed for a number of reasons including:
  - All the temperature measurements were made in a single traverse, always in the same aspect to the hearth and grate. No attempt was made to measure a temperature profile transverse to the hearth nor vertically from the grate to the roof.
  - The study erroneously presumes a linear temperature regression from a presumed or theoretical combustion temperature (2012 °F) to the point of measurement. It ignores data related to combustion temperatures from grate level thermocouples, which was included in the data appendices. It further ignores the temperature variations associated with zones of oxidation and reducing flame that must be present in the combustor, and which will vary considerably with the balance of underfire and overfire combustion air and air temperature.
  - The study fails to correlate steam production and varying radiation errors associated with differing steam pressure and temperature. The study was all conducted at a "normal", or "nominal" steam production rate of 90,000 to 95,0000 lb/hr.
  - The study fails to adequately describe the placement of the roof temperature thermocouples
    with respect to steam tubing and radiation shielding to assure reproducibility of the data after
    cleaning or replacing the thermocouples.
- 3. The Department recognizes that the temperature and dwell time factors included in the PSD and Title V permits were based on 1980's regulatory philosophies. These design and compliance criteria were based on chambered incinerator and tube kiln facilities that are quite different from the resource

"More Protection, Less Process"

Mr., Leon Brasowski Ogden Energy Group, Inc December 21, 2000

recovery boilers at this facility. It is plausible that neither direct, nor surrogate combustion zone temperature may represent the most appropriate method of monitoring the performance of this facility. New EPA regulations envision a movement toward continuous monitoring of combustion rather than relying upon surrogate indicators. The use of a surrogate measurement indicator for a surrogate performance indicator, as is the case with measuring roof temperatures to imply compliance with combustion temperature, is at best only implying good combustion chemistry. In an effort to be consistent with the permitting of other municipal waste combustors, the Department will consider a request from Ogden Martin to remove these combustion zone temperature monitoring conditions, as indicators of compliance, from the current permits. The Department will require reasonable assurance that continuing compliance with all environmental regulations can be achieved by the direct monitoring or real time combustion chemistry, especially carbon monoxide, with CEMS, and by directly monitoring combustion heat through steam production.

If you wish, we can meet to discuss either of these two concerns If you have any further questions please contact William Leffler at 850 921-9522 or Scott Sheplak at 850 921 9532.

Sincerely,

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

cc:

Scott Sheplak Administrator. Title V Section Bill Thomas P.E., SED A. Nguyn SED

William R. Crellin



40 Lane Road Fairlield, NJ 07007-2615 973 882 9000 Fax 973 882 4156

February 7, 2001

C. H. Fancy, P. E.
Chief, Bureau of Air Regulation
Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Title V Air Operating Permit 1010056-002AV and Permit PSD-FL-127
Pasco County Resource Recovery Facility

Dear Mr. Fancy,

We certainly appreciate the review that the Department has provided as noted in your correspondence of December 26, 2000 regarding our May 24, 1991 roof top temperature combustion zone temperature correlation document. As you know, that report represented the documentation of data collected to establish a correlation to develop a means for demonstrating compliance with the PSD specific condition #1 as no standard test procedures existed at that time nor do they today. These procedures were developed with the Department's Southwest district office and have been the basis for compliance with the above noted temperature requirement since that time.

We are in concurrence with the department's position that the temperature and dwell time factors included in the PSD permit were based upon 1980's regulatory practices which required either direct or surrogate combustion zone measurements and no longer represent the most appropriate method of monitoring the performance of this facility. This monitoring is dated and redundant as reflected by USEPA's establishment of Good Combustion Practices (GCP) and the promulgation of Emission Guidelines for the Municipal Waste Combustion Industry. We made that comment in our review of the initial Draft Title V permit as documented as item #20 in correspondences dated December 14, 1999.

Mr. C. H. Fancy, P.E. February 7, 2001 Page 2 of 4

As the department indicated a desire to make the permit for this facility consistent with the permitting of other Municipal Waste Combustors (MWC), and sharing an understanding of the history of the current PSD permit condition, the Ogden Energy Group believes a formal request to remove the combustion monitoring temperature condition noted above, as indicators of compliance, from the current permits is in order. Pasco County will be approaching the department shortly to make this request.

We believe that demonstration of continuing compliance with the intention of this condition would occur by including all provisions of Good Combustion Practices (GCP) as identified by the USEPA without roof top temperature monitoring. The provisions of GCP was clarified in the preamble to the MWC Emission Guidelines and in the Background Information Document (USEPA 453/R-95-0136) as follows:

- a. Applies to both large and small MWC plants.
- b. A site-specific operator training manual is required to be developed and made available for MWC personnel.
- c. The EPA or State MWC operator training course must be completed by the MWC chief facility operator, shift supervisors, and control room operators.
- d. The ASME (or State-equivalent) operator certification must be obtained by the MWC chief facility operator (mandatory), shift supervisors (mandatory), and control room operators (optional).

The MWC load level is required to be measured and not to exceed 110 percent of the maximum load level measured during the most recent dioxin/furan performance test.

- e. The PM control device inlet flue gas temperature is required to be measured and not to exceed the temperature 17°C above the maximum temperature measured during the most recent dioxin/furan performance test.
- f. The CO level is required to be measured using CEMS, and the concentration in the flue gas is required not to exceed the following:

MWC type Mass burn waterwall

CO level/Averaging time 100 ppmdv 7% O<sub>2</sub>/ 4-hour

The Pasco Resource Recovery Facility complies with all of these applicable requirements which are already included as conditions in the Title V permit.

In response to a specific comment regarding the identification of specific temperatures and residence times for the combustion zone the USEPA responded:

"Good combustion practices were developed by the EPA to minimize both formation and emission of dioxins/furans and other trace organics. There are three components to GCP: a CO emission limit, a load limit, and a

Mr. C. H. Fancy, P.E. February 7, 2001
Page 3 of 4

temperature at the inlet of the PM control device. All three of these continuous compliance parameters have been shown to correlate with either formation or emission of dioxins/furans.

Low CO level is a surrogate parameter used to indicate the operation at combustion conditions conducive to the furnace destruction of trace organics. The load limit is used to control excessive entrainment PM (PM carryover) which can lead to formation of dioxins/furans downstream of the combustor. The PM control device inlet temperature limit is to limit formation of dioxins/furans on fly ash within the PM control device by controlling formation rates. Peak formation rates occur near 300 °C (570 °F) and decrease with decreasing temperatures. Below about 225 °C to 250 °C (435-480 °F) the formation rates are negligible. The temperature limit also controls partitioning of dioxin/furan between the solid and vapor phases. At lower temperatures, dioxins/furans remain adsorbed on PM and are disposed with the collected fly ash. There is no evidence that dioxins/furans absorbed on fly ash can be volatilized at ambient temperatures nor leached in landfills.

The EPA spent a substantial amount of resources investigating. developing, and documenting GCP. The EPA's first effort resulted in a report on the combustion control of organics (Municipal Waste Combustion Study: Combustion Control of Organics, EPA/530-SW-87-021c, June 1987). This report on the control of organics contained tables summarizing recommendations for good combustion practices to control organic emissions from mass burn, RDF, and modular starved-air MWC's. Recommendations were included for a combustion temperature of 980 °C (1800 °F) at fully mixed conditions, a 50 ppm CO emission limit, a range of flue gas O 2 concentrations for each combustor, the use of overfire air for mixing, turndown restrictions, and the use of auxiliary fuel to correct for low temperatures or high CO. In reviewing these recommendations, it was decided that only three parameters would be required to demonstrate continuous compliance with GCP. These include a CO emission limit to insure operation at combustion conditions which are indicative of the furnace destruction of organics, a load limit which is to control the amounts of PM which are carried out of the combustor with flue gases, and a temperature limit at the inlet of each PM control device to control formation of CDD/CDF within each control device."

Mr. C. H. Fancy, P.E. February 7, 2001 Page 4 of 4

In addition, MWC facilities, including Pasco, are subject to emission limits for MWC organics, i.e. total dioxins/furans which are based upon the best emission control technology, a combination of spray dryer/fabric filter, GCP and carbon injection. The utilization of spray dryer/fabric filter provides compliance with the temperature requirements of GCP. The injection of carbon is also known to promote the reduction for PCDD/PCDF emissions and thus provides additional assurance that combustion related pollutants will be maintained below the applicable emission limits. The associated process monitoring; (i.e. carbon injection rates), provides reasonable real time assurance that the facility is in full compliance without the use of surrogate temperature monitoring which we will certify in conjunction with the requirements of the Title V permit.

We can discuss this further as you desire, following the request by Pasco County to modify the permits. If you have any further questions please call me at 973-882-7285.

Sincerely,

Leon Brasowski

Vice President, Environmental Permitting

cc:

S. Sheplak

J. Miller

J. Gorrie, CDM

V. Mannella, Pasco County

SENDER: COMPLETE THIS SECTION	COMPLETE THIS SECTION ON DELIVERY
<ul> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	Received by Please Print Clearly)  B. Date of Delivery  Signature  Agent  Addressee  D. Is delivery address different from item 1 Yes
1. Article Addressed to:	D. Is delivery address different from item 1? Yes
Mr. John J. Gallagher Gounty Administrator Pasco County Board of County Commissioners	<b>国名</b>
West Pasco Government Center S-340 7530 Little Road	Service Ail
New Port Richey, FL 34654	4. Restricted Delivery? (Extra Fee) ☐ Yes
2. Article Number (Copy from service label) 7000 0520 0020 9371 1670	
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1670	Mr. John J.	Gallagher				
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7000	Mr John J Gallagher Street, Apt. No.; or PO Box No. 7530 Little Road  CON State 1784 Richey, Florida 34654					
7						
	PS Form 3800, February 2000 See Reverse for Instructions					



### Department of Environmental Protection

## Division of Air Resource Management RESPONSIBLE OFFICIAL NOTIFICATION FORM

Note: A responsible official is not necessarily a designated representative under the Acid Rain Program. To become a designated representative, submit a certificate of representation to the U.S. Environmental Protection Agency (EPA) in accordance with 40 CFR Part 72.24.

Identification of Facility					
Facility Owner/Company Name:					
•	ty Board of County Commis	sioners			
2. Site Nam	e:	2. Count	y:		
Pasco Co	ounty Resource Recovery	Pasco			
Facility					
( .	3. Title V Air Operation Permit/Project No. (leave blank for initial Title V applications): 1010056002AV (PPS # PA8723				
Notification Typ	e (Check one or more)				
≤ INITIAL:	Notification of responsible	officials for an initia	d Title V application.		
≤ RENEWAL:	Notification of responsible	officials for a renew	al Title V application.		
X CHANGE:	Notification of change in re-	sponsible official(s)	-		
	Effective date of change in	responsible official(	s) <u>09/01/04</u>		
Primary Respon	sible Official				
1. Name and Po	sition Title of Responsible Of	ficial:			
John J. Galla	John J. Gallagher, County Administrator				
2. Responsible	Official Mailing Address:				
Organization	Firm: Pasco County				
Street Addres	ss: 7530 Little Road, New Po	rt Richey, Florida	34654		
City: New Po	ort Richey	State: Florida	Zip Code: 34654		
3. Responsible	Official Telephone Numbers:				
Telephone:	(727) 847-8115	Fax:			
4. Responsible Official Qualification (Check one or more of the following options, as applicable):					
<ul> <li>[ ] For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.</li> <li>[ ] For a partnership or sole proprietorship, a general partner or the proprietor, respectively.</li> </ul>					
[X] For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.					
ine designated	representative at an Acid Rain so	ource.			

Post-it <sup>®</sup> Fax Note 7671	Date 12/1 # of pages ▶ 3
To Tim Permington	From Kristin
Co./Dept. FOEP	co. Prixo County PIRE
Phone #	Phone # 727-856-0119
Fax# 850-922-6979	Fax# 727-861-3099



Ad	ditional Responsible Official			
1.	Name and Position Title of Responsible Of	ficial:		
	John Power, Solid Waste Facility Manag	ger		
2.	Responsible Official Mailing Address: Organization/Firm: Pasco County Resource	ce Recovery		
	Street Address: 14230 Hays Road			
,	City: Spring Hill	State: Florida	Zip Code: 34610	
3.	Responsible Official Telephone Numbers:			
	Telephone: (727) 856-0119	Fax: (727)	861-3099	
4.	Responsible Official Qualification (Check	one or more of the fol	lowing options, as applicable):	
[]	For a corporation, the president, secretary, to			
	of a principal business function, or any other person who performs similar policy or decision- making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.			
11	For a partnership or sole proprietorship, a g			
	For a municipality, county, state, federal, o			
	officer or ranking elected official.			
	The designated representative at an Acid Ra	in source.		
Ad	ditional Responsible Official			
	Name and Position Title of Responsible Of	ficial:		
2.	Responsible Official Mailing Address: Organization/Firm:			
	Street Address:			
	City:	State:	Zip Code:	
3.	Responsible Official Telephone Numbers:	· · · · · · · · · · · · · · · · · · ·		
	Telephone: ( ) -	_ Fax: (	) -	
4.	Responsible Official Qualification (Check	one or more of the fol	lowing options, as applicable):	
[ ] For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C.				
	[ ] For a partnership or sole proprietorship, a general partner or the proprietor, respectively. [ ] For a municipality, county, state, federal, or other public agency, either a principal executive			
	officer or ranking elected official.			
[]	The designated representative at an Acid Ra	in source.		

DEP Form No. 62-213.900(8)

Effective: 6-02-02