PM 8-13-86 Tavares FL

DER

STATE OF FLORIDA

AUG 1 4 1986

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING 2600 BLAIR STONE ROAD TALLAHASSEE, FLORIDA 32301



GOVERNOR

VICTORIA J. TSCHINKEL SECRETARY

WAIVER OF 90 DAY TIME LIMIT UNDER SECTIONS 120.60(2) AND 403.0876, FLORIDA STATUTES

License (Permit,	Certification)	Application No.	PSD-FL-113 AC 35-115379
Applicant's Name:	NRG/Reco	overy Group	

The undersigned has read Sections 120.60(2) and 403.0876, Florida Statutes, and fully understands the applicant's rights under that section.

With regard to the above reference license (permit, certification) application, the applicant hereby with full knowledge and understanding of (his) (her) (its) rights under Sections 120.60(2) and 403.0876, Florida Statutes, waives the right under Sections 120.60(2) and 403.0876, Florida Statutes, to have the application approved or denied by the State of Florida Department of Environmental Regulation within the 90 day time period prescribed in Sections 120.60(2) and 403.0876, Florida Statutes. waiver is made freely and voluntarily by the applicant, is in (his) (her) (its) selfinterest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Regulation.

This waiver shall expire on the 30th day of September 1986.

The undersigned is authorized to make this waiver on behalf of the applicant.

Signature

Walt Walters, President

Please Type Name of Signee

State of Florida My Cominission Expires June 1, 1990 Bonded Thru Troy Fain Insurance Inc.

DER Form 17-1.201(8)

Effective November 30, 1982

Page 1 of 2

Section 120.60, Florida Statutes

When an application for a license is made as required by law, the agency shall conduct the proceedings required with reasonable dispatch and with due regard to the rights and privileges of all affected parties or aggrieved persons. Within 30 days after receipt of an application for a license, the agency shall examine the application, notify the applicant of any apparent errors or omissions, and request any additional information the agency is permitted by law to require. Failure to correct an error or omission or to supply additional information shall not be grounds for denial of the license unless the agency timely notified the applicant within this 30 day period. The agency shall notify the applicant if the activity for which he seeks a license is exempt from the licensing requirement and return any tendered application fee within 30 days after receipt of the original application or within 10 days after receipt of the timely requested additional information or correction of errors or omissions. Every application for license shall be approved or denied within 90 days after receipt of the original application or receipt of the timely requested additional information or correction of errors or omissions unless a shorter period of time for agency action is provided by law. The 90-day or shorter time period shall be tolled by the initiation of a proceeding under Section 120.57 and shall resume 10 days after the recommended order is submitted to the agency and the parties. Any application for a license not approved or denied within the 90-day period or shorter time period, within 15 days after conclusion of a public hearing held on the application, or within 45 days after the recommended order is submitted to the agency and the parties, whichever is latest, shall be deemed approved and, subject to the satisfactory completion of an examination, if required as prerequisite to licensure, the license shall be issued. The Public Service Commission, when issuing a license, and any other agency, if specifically exempted by law, shall be exempt from the time limitations within this subsection. Each agency, upon issuing or denying a license, shall state with particularity the grounds or basis for the issuance or denial of same, except where issuance is a ministerial act. On denial of a license application on which there has been no hearing, the denying agency shall inform the applicant of any right to a hearing pursuant to Section 120.57.

Section 403.0876, Florida Statutes

Permits; processing. ---Within 30 days after receipt of an application for a permit under this chapter, the department shall review the application and shall request submittal of all additional information the department is permitted by law to require. If the applicant believes any departmental request for additional information is not authorized by law or departmental rule, the applicant may request a hearing pursuant to s. 120.57. Within 30 days after receipt of such additional information, the department shall review it and may request only that information needed to clarify such additional information or to answer new questions raised by or directly related to such additional information. If the applicant believes the request of the department for such additional information is not authorized by law or departmental rule, the department, at the aplicant's request, shall proceed to process the permit application. Permits shall be approved or denied within 90 days after receipt of the original application, the last item of timely requested additional material, or the applicant's written request to begin processing the permit application.

DER Form 17-1.201(8)

Effective November 30, 1982

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

be filed:	
 _	

MEETING DOCUMENTATION

Attendees: (Attach list)
Location: BARM Confirm Date: Ang. 7, 1986 Time: 9:00 a.
Subject: Permitting Enforcement Other
Meeting requested by: Steve Smallwal / Bub Chaltent
Meeting Objectives: Decide how to handh the BACT determination based on status and research that had been done by BACM and the applicant
Notes:
Bob Chalfant and Barry Andrews reported on
finding from researching the dry injection technology
for acid gas control. Their reports dethick stightly
+ 1+ was decided that although the technology
and been trul in Funge and would som be with
+ a full scale MXF in Davis County Often, Mills
ime 13 needed to obtain rish Hs from its operation in
tal before such technology would be required on a
celly have in Florida.

Agreements/Conclusions Reached:

BACT will consist of leaving space for acid gas
control technology for the facility but this is
Subject to change based on subsequent valuables,
for acid visioner vectory facilities.

Follow-up Actions/Dates:

BACT determination will be rewritten to in corporate changes and be ready for signatures by Angust 14, in order to send the Preliminary applicate determination out by the 15th

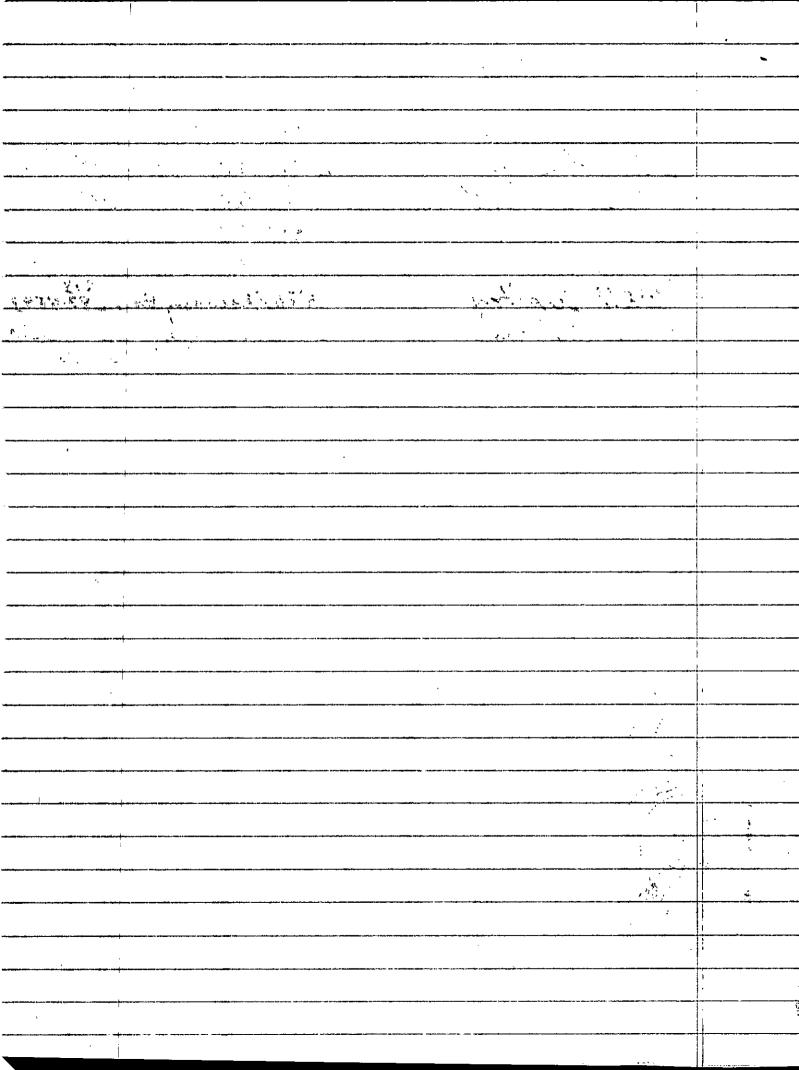
Prepared by: Band Andem (sign)

Lake County RRF Meeting 8-7-86 DER/BAQM · (904) 488-1344 Barry anheur DER/BARM (904/488-1344 Edward Suce Jesse Frullwood

Gir Francy

Julie Cold Costas

WAlt Walters DEL/BAGM 11 DER / D 6-C 488-9730 NRG/Recovery Group 687-4593 Lockwood Greene Eng / LGM (404) 873-3261 Bob Chalfant



STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING 2600 BLAIR STONE ROAD TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM GOVERNOR VICTORIA J. TSCHINKEL

MEMORANDUM

TO: Mr. Walt Walters

> Representative Chuck Smith Representative Everett Kelly Assistant Secretary Al Devereaux

Steve Smallwood, Chief-FROM:

Bureau of Air Quality Management

DATE: July 10, 1986

AIR PERMIT FOR LAKE COUNTY MUNICIPAL SOLID WASTE SUBJ:

INCINERATOR

Tallahassee Meeting, July 8, 1986

Following our meeting at the Capitol on the morning of Tuesday, July 8, about the air permit for the Lake County MSW Incinerator, a meeting was convened in the BAQM conference room to discuss the technical aspects of this project. That meeting was attended by:

Name:

Affiliation:

Chuck Smith Everett Kelly Paula Allen

House of Representatives House of Representatives House Natural Resources Committee Staff

NRG/Recovery Group, Inc. Walt Walters NRG/Recovery Group, Inc. Jan Swiger Bob Chalfant Lockwood Greene Engineering

Barry Andrews BAQM Clair Fancy BAQM Steve Smallwood BAQM

Representative Smith and Representative Kelly participated in the first part of the meeting which involved a general discussion of the issues involved in this air permitting case. The other attendees listed participated in the second part of the meeting which involved a technical discussion of the air rule requirements which apply to new MSW incinerators and the rationale

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111 4:	Initial & Forward		
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1986	Prepare Response For My Signature		
,	For Your Signature		
MÇ	Let's Discuss		
37 × 40	Set Up Meeting		
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	Concurrence		
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FROM:	DATE		
Store Smallwood	PHONE		

Page Two July 10, 1986

behind the department's proposed BACT (Best Available Control Technology) determination for the Lake County Incinerator. Walt Walters and Bob Chalfant identified where they agreed and where they questioned the determinations made by the BAQM air permitting staff. Walt Walters and Jan Swiger explained the financing problems involved in the project and the role the Lake County Commissioners have in the financing of the project.

Mr. Walters, who is the official applicant for the air permit for this project, and I agreed to the following at the conclusion of the meeting:

- (1) Mr. Walters would grant the department an extension of time until August 15, 1986, to propose final agency action on the permit. A copy of the waiver is attached.
- (2) During the next two weeks, Bob Chalfant and Barry Andrews will each further investigate the possibility of an intermediate technology—meaning intermediate between the electrostatic precipitator proposed by the applicant and the dry scrubber baghouse proposed by the staff. Mr. Chalfant agreed with Barry Andrews that there are intermediate technologies such as limestone injection, but he did not have specific cost data on the technology. He needs to determine if bankers would consider the technology adequately demonstrated to allow them to fund its use.
- (3) Bob Chalfant was invited to attend the MSW Incinerator Roundtable Discussion that the Bureau is planning to conduct on July 17. He has a commitment which might not allow him to be present on that day. Barry Andrews will talk with him by phone a few days after the roundtable discussion to advise him of the outcome and to provide him with the names and telephone numbers of participants so he can talk with them directly if he wished to do so.
- (4) Before the end of July, I will meet with Bob Chalfant here in Tallahassee to discuss the results of his technical inquiries. I will then discuss with Dr. Devereaux the options that appear to be available to the department with respect to modifying the proposed permit. No later than the first week in August, I will talk with Mr. Walters to advise him of the department's view as to whether there is a middle ground that we can reach on the issuance of the permit. If

Page Three July 10, 1986

necessary, we will meet and further discuss this issue during the first week in August.

By August 15, the department will either formally notify (5) Mr. Walters that the department intends to issue permit as presently drafted or will issue a Notice of Intent to issue an amended permit. If the department and the applicant reach an agreement on modifying the draft permit, the department will issue an intent to modify its preliminary determination on the permit and issue an amended permit. Fourteen days will be allowed after issuance of the notice for any affected person (including the applicant) to file for a 120.57 hearing. In the notice of such a proposed change the department will word the notice to make it as clear as possible to the citizens of Lake County and other interested persons what specific changes are being proposed, and what the difference is in the environmental impact and economic cost of the proposed change compared to the original draft permit.

If a third party does not request a hearing on the project the applicant could be issued a final permit early in September and could expect to proceed with on-site construction by the end of September.

In describing the application and the intent of the federal and state rules which apply to this proposed incinerator, the department staff explained why they have concluded that BACT for these types of facilities includes acid gas control, in addition to high temperature combustion and fine particulate control. The staff indicated that a less expensive means of acid gas control (limestone injection) could be considered BACT in this specific case although it may not be and probably wouldn't be BACT for larger incinerators.

The reason for controlling acid gases is not just the potential adverse affects from emitting quantities of sulfuric and hydrochleric acid from the incinerator stack but the fact that these acids can react with other substances in the exit gas stream to form various toxic air pollutants, including dioxin and furans. Reducing the acid mist and acid gases in the gas stream can substantially reduce the amount of the secondary toxic pollutants that can be emitted from the incinerator.

Page Four July 10, 1986

Bob Chalfant was asked to evaluate each condition in the proposed permit and to be prepared to tell me what changes he believes could be made that could result in any significant cost savings to the applicant (and therefore the county) while staying within the general range of emission rates that have been allowed for other similiar incinerators within the last year.

Mr. Walters advised me that he and Representative Kelly would be talking with the Lake County Commissioners about the status of the air permit application and what the county commissioners determine to be feasible for financing the additional marginal cost to include some form of acid gas control as part of the air pollution control equipment proposed for the incinerator. (The applicant originally proposed an electrostratic precipatator (ESP) without acid gas control. The department's air permitting staff concluded a baghouse and dry scrubber (for acid gas control) or something equivalent to this is required by the BACT rule.

A tentative date for me to meet with Bob Chalfant is July 24. A tentative date for meeting with Mr. Walters during the first week of August should that become necessary is August 7, 1986. I expect to talk with Mr. Walters by phone on or about July 29 or 30 concerning my discussions with the engineers and with Assistant Secretary Devereaux about the possibility of amending the department's proposed BACT determination for the Lake County MSW Incinerator.

SS:jr

cc: Howard Rhodes
Gary Early
Clair Fancy
Barry Andrews
Bob Chalfant
Paula Allen

DER

JUL 1 4 1986

BAQM

July 9, 1986

Mr. Barry Andrews, Engineer Bureau of Air Quality Management Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, FL 32301

Dear Barry

Thanks for your time and comments Tuesday. I appreciate the reception we received from everyone at D.E.R. and am convinced that we will reach an equitable compromise that will allow Lake County to build a Waste-to-Energy facility without doing great harm to our air quality.

I realize that there is a technical difference of opinion between you and Bob Chalfant, but Know that both of you are professionals and I am confident that your negotiations and determinations will allow the construction of an economical plant.

Thanks again, Barry, we realize the trouble you are going to on behalf of Lake County. ___

Walt Walters

Cordially yo

State of Florida DEPARTMENT OF ENVIRONMENTAL REGULATION



Imteroffice Memorandum

FOR ROUTING TO OTHER THAN THE ADDRESSEE	
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To: Loctn:	_
То: Locths:	
FROM: DATE:	_

TO:

Clair Fancy

THROUGH:

Marshall Mott-Smith Mins by M

John A. Reese

FROM:

Jan Rae Clark JD

DATE:

July 9, 1986

SUBJECT: Joint Response to NRG/Recovery Group Inc.

The attached letter was sent to Bob McVety in response to a request for information about the possible economic impacts of a proposed PSC action on resource recovery projects. We intend to respond to this letter, thanking Mr. Walters for the information he provided us. However, Mr. Walters has raised some issues about proposed air emission controls and their costs that we feel your section may wish to address.

Please let us know if you want to draft a joint response or respond independently.

JRC/tkm

Attachment

DER

ROUTING AND TRANSMITTAL SLIP	ACTION NO		
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Jankal Clark	PHONE	186	

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND	ACTION NO
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· Jan Clark	Date 7/1 %
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	Date
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	Date
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with an a	Distribute
	Concurrence
	For Processing
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FROM:	DATE 6-27-86
Marshall	PHONE

MarehallPle set TRC to share the with smallwood. He may wish to repond Rum

DECEIVED

Bureau of Waste Management

June 24, 1986

Mr. Robert W. McVety, Chief

Bureau of Waste Management Department of Environmental Regulation Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32301-8241

Dear Mr. McVety

Your letter of May 23rd was most appreciated. I agree that those of us within the Waste-to-Energy industry must cooperate with the various State rulemaking agencies by informing them of the adverse effect certain of their decisions have upon the economic feasibility of our projects and I appreciate your concern that the PSC proposals may harm the development of much needed Resource Recovery Projects.

Mr. McVety, my initial review of the proposed PSC action is that, while the increased expenses seem uncalled for and counter-productive, the economic impact will be minor (the increase in non-firm wheeling rate by Corp amounts to <u>less than four cents per ton of MSW</u>) and the economics of-projects similar to our Lake County facility will be only slightly-affected compared to the economic hardship caused by certain recent determinations within your own Department.

Our contract with Lake County calls for us to perform the waste-reduction service for \$9.43 per ton in 1988 and our technology (engineered by Lockwood Greene Engineers, Inc., Atlanta) meets or exceeds all accepted standards for emmissions into the atmosphere.

However, the recently received "Technical Evaluation and Preliminary Determination" (Permit Nos. AC 35-115379 PSD-FL-113) by your Bureau of Air Quality Management demands we meet unusually stringent emission standards that were set in order to require the use of certain scrubbers and baghouses which will increase the cost (as determined by DER) to the taxpayers of Lake County by 47 %. A more realistic cost determination done by Townsend and Bottom, Inc. and Lockwood Green puts the extraordinary cost at possibly \$5.50 per ton (a 58 % premium).

What this means, Mr. McVety, is that even though our engineering is sound and within ALL acceptable standards, DER has determined that BACT dictates the citizens of Lake County be penalized for attempting to do their part in meeting the goal of the State's Comprehensive Plan to reduce landfilled waste to 55% of the 1985 volume.

Unfortunately, Lake County seems to have become affected by the political controversy presently engulfing Broward County and the Bureau of Air Quality Management. Although DER has evidently determined that certain areas of our state need excessive care in treating atmospheric emmissions because of alledged extreme existing conditions or anticipated enormous growth, I find it hard to believe that DER is willing to endanger this project when Lake County is certainly not an impacted area nor is it likely to be within the expected life of this facility.

Mr. McVety, your letter invited me and other Resource Recovery project Managers to express our concerns to the PSC if their proposed agency action endangered our project.... may I now solicit your support in rescuing a project that will undoubtedly fall victim to adverse recommendations from another Bureau within your own Department. The PSC ruling would only have a one-third-of-one-percent affect on Lake County citizens while the Bureau of Air Quality Management is proposing to penalize homeowners with an unwarranted 47% increase in costs.

Cordially yours

Walt Walters

Lake County MSW INcincrator

Name	Deganization	Phone		
Steve Smallwood	DER BRAM	488-1344		
Clair Fancy	10 (1			
BANY ANDREWS		42/070 20/1		
Lock Smith	Lockwood Greene E	404-296-9610		
Everett Kelly	Legislature			
Paula Allen	House Rodush Rosonies_	904-488-1564		
Walt Walters	NRG/Recovery Group, I.			
Jan Swiger	//	813/638-3626		
	·			

ISCST (DATED 85322)

AN AIR QUALITY DISPERSION MODEL IN SECTION 1. GUIDELINE MODELS

IN UNAMAP (VERSION 6) JULY 86.

SOURCE: FILE 6 ON UNAMAP MAGNETIC TAPE FROM NTIS.

*** LAKE COUNTY WIE FACILITY -- NOV. 1987

CALCULATE (CONCENTRATION=1, DEPOSITION=2) RECEPTOR GRID SYSTEM (RECTANGULAR=1 DR 3, POLAR=2 OR 4) DISCRETE RECEPTOR SYSTEM (RECTANGULAR=1, POLAR=3) TERRAIN ELEVATIONS ARE READ (YES=1, NO=0) CALCULATIONS ARE WRITTEN TO TAPE (YES=1, NO=0) LIST ALL INPUT DATA (NO=0, YES=1, MET DATA ALSO=2)	ISW(1) = 1
RECEPTOR GRID SYSTEM (RECTANGULAR=1 DR 3, POLAR=2 OR 4)	ISW(2) = 4
DISCRETE RECEPTOR SYSTEM (RECTANGULAR=1, POLAR=3)	ISW(3) = 1
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LIST ALL INPUT DATA (ND=0, YES=1, MET DATA ALSO=2)	ISW(6) = 1
COMPUTE AVERAGE CONCENTRATION (OR TOTAL DEPOSITION)	
WITH THE FOLLOWING TIME PERIODS:	
HOURLY (YES=1, NO=0)	IS#(7) = 0
2-HOUR (YES=1,NO=0)	ISW(8) = 0
3-HDUR (YES=1,ND=0)	ISW(9) = 1
4-HDUR (YES=1,NO=0)	ISW(10) = 0
6-HOUR (YES=1, NO=0)	ISW(11) = 0
8-HOUR (YES=1, NO=0)	ISW(12) = 0
12-HOUR (YES=1, NO=0)	ISW(13) = 0
24-HOUR (YES=1, NO=0)	$ISW(14) = \underline{1}$
PRINT 'N'-DAY TABLE(S) (YES=1,NO=0)	ISW(15) = 1
·	
PRINT THE FOLLOWING TYPES OF TABLES WHOSE TIME PERIODS ARE	
SPECIFIED BY ISW(7) THROUGH ISW(14):	
DAILY TABLES (YES=1,ND=0)	ISW(16) = 0
DAILY TABLES (YES=1,ND=0) HIGHEST & SECOND HIGHEST TABLES (YES=1,ND=0)	ISW(17) = 1
MAXIMUM 50 TABLES (YES=1, NO=0)	ISW(18) = 1
METEOROLOGICAL DATA INPUT METHOD (PRE-PROCESSED=1, CARD=2)	ISW(19) = 1
RURAL-URBAN OPTION (RU.=0, UR. MODE 1=1, UR. MODE 2=2, UR. MODE 3=3)	ISW(20) = 0
WIND PROFILE EXPONENT VALUES (DEFAULTS=1, USER ENTERS=2, 3)	ISW(21) = 1
VERTICAL POT. TEMP. GRADIENT VALUES (DEFAULTS=1, USER ENTERS=2, 3)	ISW(22) = 1
SCALE EMISSION RATES FOR ALL SOURCES (NO=0, YES)0)	1SW(23) = 0
PROGRAM CALCULATES FINAL PLUME RISE ONLY (YES=1,NO=2)	ISW(24) = 1
PROGRAM ADJUSTS ALL STACK HEIGHTS FOR DOWNWASH (YES=2, NO=1)	ISW(25) = 2
PROGRAM USES BUDYANCY INDUCED DISPERSION (YES=1,NO=2)	ISW(26) = 1
CONCENTRATIONS DURING CALM PERIODS SET = 0 (YES=1,NO=2)	ISW(27) = 1
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NUMBER OF INPUT SOURCES	NSOURC = 1
NUMBER OF SOURCE GROUPS (=0, ALL SOURCES)	NGROUP = 0
TIME PERIOD INTERVAL TO BE PRINTED (=0, ALL INTERVALS)	IPERD = 0
NUMBER OF X (RANGE) GRID VALUES	NXPNTS = 5
NUMBER OF Y (THETA) GRID VALUES	NYPNTS = 3E
NUMBER OF DISCRETE RECEPTORS	NXWYPT = 0
SOURCE EMISSION RATE UNITS CONVERSION FACTOR	TK=.10000E+07
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SURFACE STATION NO.	ISS = 12815
YEAR OF SURFACE DATA	ISY = 75

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UPPER AIR STATION NO.
YEAR OF UPPER AIR DATA
ALLOCATED DATA STORAGE
REQUIRED DATA STORAGE FOR THIS PROBLEM RUN

TUS = 12842 TUY = 76 LIMIT = 43500 WORDS

*** LAKE COUNTY WIE FACILITY -- NOV. 1987

MIMIT = 2998 WORDS

*** METEOROLOGICAL DAYS TO BE PROCESSED ***

(1F=1)

*** UPPER SOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***

(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** WIND PROFILE EXPONENTS ***

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*** VERTICAL POTENTIAL TEMPERATURE GRADIENTS *** (DEGREES KELVIN PER METER)

STABILITY		WIN	D SPEED CATEGOR	ŕ		
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D	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
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*** LAKE COUNTY WITE FACILITY -- NOV. 1987

(METERS)

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EMISSION RATE

*** RADIAL ANGLES OF POLAR GRID SYSTEM ***

(DEGREES)

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*** LAKE COUNTY WTE FACILITY -- NOV. 1987

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*** SOURCE DATA ***

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N-DAY 366 DAYS SGROUP# 1

*** LAKE COUNTY WITE FACILITY -- NOV. 1987

* 365-DAY AVERAGE CONCENTRATION (MICROGRAMS/CUBIC METER)

* FROM ALL SOURCES * * FOR THE RECEPTOR GRID *

* MAXIMUM VALUE EQUALS 1.16353 AND DCCURRED AT (1500.0, 180.0) *

DIRECTION /				RAN	GE (METERS)	
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290.0 /	.52842	.61279	. 58539	.52628	.46746	
280.0 /	. 45669	.56273	.52298	.45866	.40037	
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WAIVER OF 90 DAY TIME LIMIT UNDER SECTION 120.60(2), FLORIDA STATUTES

					PSD-FL-113
License	(Permit,	Certification)	Application	No.	AC 35-115379
Applican	t's Name:	NRG/Recovery	Group		

The undersigned has read Section 120.60(2), Florida Statutes, and fully understands the Applicant's rights under that section.

With regard to the above referenced license (permit, certification) application, the Applicant hereby with full knowledge and understanding of (his) (her) (its) rights under Section 120.60(2), Florida Statutes, waives the right under Section 120.60(2), Florida Statutes, to have the application approved or denied by the State of Florida Department of Environmental Regulation within the 90 day time period prescribed in Section 120.60(2), Florida Statutes. Said waiver is made freely and voluntarily by the Applicant, is in (his) (her) (its) self-interest, and without any pressure or coercion by anyone employed by the State of Florida Department of Environmental Regulation.

This waiver shall expire on the 15th day of August 1986.

The undersigned is authorized to make this waiver on behalf of the applicant.

CIN OF AR SOLVER

Sworn to and subscribed before me this 9 day

My Commission Expires May 21, 1989 Bonded Janu Zone Edgis Jasuengo, Jasu Walt Walters, President

Name of Signee

186

Signature

Date

DER Form 17-1.122(71) Page 1 of 2

(2) When an application for a license is made as required by law, the agency shall conduct the proceedings required with reasonable dispatch and with due regard to the rights and privileges of all affected parties or aggrieved persons. Within 30 days after receipt of an application for a license, the agency shall examine the application, notify the applicant of any apparent errors or omissions, and request any additional information the agency is permitted by law to require. Failure to correct an error or omission or to supply additional information shall not be grounds for denial of the license unless the agency timely notified the applicant within this 30 day period. The agency shall notify the applicant if the activity for which he seeks a license is exempt from the licensing requirement and return any tendered application fee within 30 days after receipt of the original application or within 10 days after receipt of the timely requested additional information or correction of errors or omissions. Every application for license shall be approved or denied within 90 days after receipt of the original application or receipt of the timely requested additional information or correction of errors or omissions. Any application for a license not approved or denied within the 90-day period or within 15 days after conclusion of a public hearing held on the application, whichever is latest, shall be deemed approved and, subject to the satisfactory completion of an examination, if required as a prerequisite to licensure, license) shall be issued. The Public Service Commission, when issuing a license, and any other agency, if specifically exempted by law, shall be exempt from the time limitations within this subsection. Each agency, upon issuing or denying a license, shall state with particularity the grounds or basis for the issuance or denial of same, except where issuance is a ministerial act. On denial of a license application on which there has been no hearing, the denying agency shall inform the applicant of any right to a hearing pursuant to s. 120.57.

FACT SHEET

Lake County RRF

7/8/86

01/20/86 Meeting with Bob Chalafant of Lockwood Greene, Walt Walters of NRG, Ed Svec and Barry Andrews. Discussed the project in general, the information needed in the application, the need for BACT information, etc. We were asked about controls and discussed the various types, but told them the decision on BACT would be made after we received a complete application.

03/18/86 Application received

03/26/86 Copies sent to EPA and Federal Land Manager

05/01/86 Memo to Al Devereaux on BACT (attached)

Barry Andrews and Ed Svec received a number of calls from Bob Chalafant discussing the BACT requiring scrubbers. This BACT was decided upon because, using the cost estimates presented by the applicant, the cost per household per month was \$1.00 (the same as Broward and Palm Beach) and was judged to be reasonable. The consultant was aware of the BACT before the preliminary was mailed.

05/21/86 Preliminary determination mailed to Walt Walters, President of NRG/Recovery Group

Ed Svec received a phone call Walt Walters complaining about the need for scrubbers. Walters told Svec that they did not plan for a scrubber when he signed a contract with the county; however, he had a 10% escalation clause in the tipping fee and felt that they might be able to purchase the scrubber. (The definition of commence construction is such that they may be in violation by signing a binding contract before obtaining a permit).

05/31/86 Notice published by applicant and 14 days passed without them filing for hearing.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET ATLANTA, GEORGIA 30365

4APT-AP/lms

JUL 2 1986

Mr. Bill Thomas
Bureau of Air Quality
Management
Florida Department of
Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301

DER

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Tallanassee, Florida 32301

RE: Lake County Solid Waste Energy Recovery Facility

Dear Mr. Thomas:

PSD-FL-113

This is to acknowledge receipt of your May 20, 1986, PSD preliminary determination for the above referenced facility to be located in Okahumpka, Florida. We have reviewed the determination and generally concur. However, we feel that the proposed sulfur dioxide emissions limit may not adequately reflect BACT. Although your BACT determination appears to require a scrubber for acid gas controls, no control is required for SO₂.

EPA is aware of numerous energy recovery facilities recently permitted with a requirement to reduce $\rm SO_2$ emissions by employing scrubbers. The applicant or DER should justify why such $\rm SO_2$ controls, and lower emission rates for BACT, will not be required for this source.

It is EPA policy that the control of nonregulated air pollutants may be considered in imposing a more stringent BACT limit on regulated pollutants, if there is a reduction in the nonregulated air pollutants which can be directly attributed to the control device selected for the abatement of the regulated pollutants. This policy was recently reaffirmed by the Administrator in a remand of a PSD permit for the North County Resource Recovery Facility in San Marcos, California. (This document has been sent to you under separate cover.) Therefore, your BACT determination for SO₂ should consider the effect that SO₂ controls would have on unregulated pollutants, such as HCl and dioxin.

If you have any questions or comments regarding this letter, please contact Roger Pfaff of my staff at (404) 347-4298.

Sincerely yours,

Bruce P. Miller

Bruce P. Miller Acting Chief

Air Programs Branch

Air, Pesticides, and Toxics Management Division



DER JUN 27 1986

BAQM

June 26, 1986

Mr. Bill Thomas
State of Florida Department of
Environmental Regulation
Bureau of Air Quality Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301

RE: DER FIIe No. AC 35-115379 PSD

PSD-FL-113

Application for Permit by: NRG/Recovery Group 1616 Athens Street Lakeland, FL 33803

Dear Mr. Thomas:

LGM Engineers and Constructors and Lockwood Greene Engineers, Inc. are authorized to represent NRG/Recovery Group for any and all business before the Florida Department of Regulation. We submit this letter as official response and comment regarding the department's proposed permit action referenced above.

NRG Recovery Group and LGM Engineers Constructors, designers of the proposed Lake County Waste to Energy Facility, have placed very strong emphasis on pollutant emission control in the design of the facility. We believe that the facility as proposed is in full compliance with all environmental regulations and would pose no adverse air quality impact. As designers of the proposed facility we request your consideration of our comments regarding the Florida Department of Environmental Regulation (DER) Technical Evaluation and Preliminary Determination and Proposed Permit to Construct.

Technical Evaluation Preliminary Determination

We conclude from the Preliminary Determination that the DER recommendations for emission control are based on the requirement for the application of best available control technology (BACT) for pollutants regulated under the Prevention of Significant Deterioration Rules (PSD). DER has preliminarily determined that electrostatic precipitators (ESP's), as proposed by the applicant, do not constitute BACT, and has recommended that, instead of ESP's, NRG utilize a lime slurry spray dryer and baghouse flue gas scrubbing system. Further, DER has proposed more stringent emission limits than those proposed by the



applicant based on emission levels which are believed to be attainable by the DER recommended system. It is acknowledged in the Preliminary Determination that the DER requirement for a spray dryer, baghouse system is based only upon a BACT determination, not on a need to reduce emissions to meet ambient air quality standards or emission standards.

All emission control system alternatives having demonstrated applicability to MSW incineration and meeting all regulatory requirements were considered for the NRG facility. The selection of the appropriate alternative was then based primarily on an economic assessment. The dry scrubber system proposed by DER and considered by NRG would provide for better control of sulfur dioxide, acid gas and trace pollutant emissions, but at a significant increase in cost. The costs for the alternative emission control systems were included in the PSD Application. As the DER Preliminary Determination questioned some aspects of the emission control operating costs, we are enclosing updated operating cost comparison data for the ESP and dry scrubber systems. Based on 120,000 tons MSW/year processed, which is the contracted amount to be delivered by Lake County, the added cost to operate the dry scrubber system is \$6.05/ton MSW. Based on 150,000 tons MSW/year, which is 85% capacity and the maximum expected operating rate, the added cost is \$5.11/ton MSW. We would like to address some of the specific comments by the reviewer regarding the cost data.

- 1. It was commented that bag replacement costs should be based on a four year life rather than two years. The two year life is based on the vendor guarantee of two years for pulse jet bags. Four year life may be attainable for reverse air bags, but the bag cost would be greater due to the lower air to cloth ratio and the capital cost for the reverse air baghouse would probably be greater. Thus, the capital and operating cost tradeoffs would result in a negligible difference in overall costs of the two baghouse alternatives.
- 2. The power costs now reflect the uniform annual sales value of the power generated at \$0.06/kwh.
- 3. We agree with the reviewer's statement that chemical reagent costs should be higher for a dry scrubber in conjunction with an ESP than for a dry scrubber in conjunction with a baghouse, and the relative cost difference is reflected by the Application data. We do not understand the reviewer's comment that the data reflects the contrary.
- 4. The reviewer did not restate the projected added cost for dry scrubbing for the NRG facility, but gave an unreferenced cost of \$3.35/ton MSW (1984 dollars) for another facility. Such a cost figure for two 750 TPD incinerators was given in a paper presented in November, 1985, by Dr. A. J. Teller. His paper also gave costs of \$3.92 and \$4.28/ton MSW for two 325 TPD incinerators. His data and our data support the finding that the cost impact becomes significantly greater as the size of the facility becomes smaller.
- 5. The Preliminary Determination states, "The recommendation that a dry scrubber baghouse combination should be used as the control strategy for the resource recovery facility would not be warranted if the economic costs of installing and operating the recommended control technology outweigh the benefits of controlling the pollutants



that would be controlled by the equipment". We believe that a conservatively designed system and environmentally sound project has been proposed by the applicant. We further believe that the facility is affordable to the citizens of Lake County. For the system as proposed, the reported cost to the County is approximately \$9.50/ton MSW incinerated, and an increase of \$5.00 to \$6.00/ton MSW to provide additional control of pollutants for which there is not a demonstrated need seems excessive and should be considered in the BACT determination.

The Preliminary Determination indicates that BACT includes control of HCI emissions, however, the proposed permit conditions include no limit or reduction for HCI. We request clarification of this apparent inconsistency. We believe that flue gas scrubbing is not necessary to meet generally accepted ambient air quality criteria. We also propose that scrubbing of acid gases at the NRG Lake County facility would be excessively costly and does not constitute BACT for this small facility. We request that no reduction requirement for HCI be imposed.

The potential for dioxin emissions from MSW incineration is a controversial issue nationwide. We have made this a point of special emphasis in our design and dealings with vendors. We and the selected boiler/incinerator manufacturer have been in continued contact with the EPA Office of Solid Waste to be assured that the design is in accordance with combustion time and temperature relationships and other recommendations of EPA. We are aware of reported test results that indicate that dry scrubbing can reduce the emission of dioxins from a poorly operated facility. However, we are confident that the proposed facility provides an optimum combustion system and meets all present EPA design recommendations.

In summary, we propose that for the small incineration facility proposed for Lake County high efficiency electrostatic precipitators meet the criteria for BACT and that emission limits should reflect this technology.

Proposed Permit to Construct

We have reviewed the proposed permit to construct and make the following comments.

1. The emission levels proposed in the application for the trace elements lead, fluoride and sulfuric acid mist which are based on ESP's, result in less than de minimus ambient air quality impact. We, therefore, believe the lower proposed permit emission limits based on dry scrubber technology are not necessary. Also, the estimated emission of sulfuric acid mist is less than the PSD significant level and BACT is not required. We request that the limits for lead, fluoride and sulfuric acid mist be changed to values not less than the estimates submitted in the application. For the trace pollutant beryllium there appears to be miscalculation for the annual limit. Based on the DER proposed emission limit of 1 x E-6 lb/ton the annual limit should be 4.6 x E-5 ton/yr not 4.6 x E-6 ton/yr. With regard to the proposed trace element emission limits we would like to point out an inconsistency on the part of DER. We noted that the



proposed limits for NRG in pounds per ton MSW are dramatically less and as much as a factor less than those recently proposed as BACT for a facility many times larger than NRG. It appears that DER used for the proposed limit the applicant's estimated value or some reduction from this value based on the DER recommended emission control. The uncontrolled emission factors submitted for NRG are conservative, honest estimates based on available test data, but we recognize that the confidence factor for these trace elements is not great. We do not believe that the applicant should be penalized in the form of dramatically more stringent emission limits because a lower emission factor may have been used.

- 2. The draft emission limit for sulfur dioxide is 2.8 lb/ton 30 day rolling average not to exceed 5.6 lb/ton. In our evaluation of emission data for the application we found that due to the heterogeneous nature of MSW the emission of sulfur dioxide is highly variable, and we found the present average emission factor to be around 3 lb/ton with peak values ranging to over 6 lb/ton. The intent of this slight reduction from the projected values is not clear. Is it to be inferred that dry scrubbing is necessary to meet the limit or that the DER limit is a more accurate estimate of uncontrolled emissions? Because of the unknown quality of the Lake County waste and the variability of the emission factors, we request that the emission limits for sulfur dioxide be changed to 3 lb/ton and 6 lb/ton.
- The only pollutant for which there are specific emission standards is particulate matter. 3. We recognize that the existing Florida DER incinerator standard of 0.08 grains/dscf is no longer relevant to modern incinerator technology and do not use it as a design performance standard. The proposed federal new source performance standard (NSPS) for Industrial-Commercial-Institutional Steam Generating Units (40CFR60 Subpart Db), which should be promulgated later this year, limits particulate emissions from units larger than 100 million BTU per hour input to 0.10 lb. per million BTU, which equates to approximately 0.045 grains/dscf, corrected to 12% CO2. The proposed NRG units are just over the size of applicability at 104 million BTU per hour rated heat input. We have proposed a BACT limit of 0.03 grains/dscf, which is 67 percent of the more stringent standard. The draft permit condition limits particulate matter to 0.020 grains/dscf, corrected to 12% CO2, based on the reported performance of dry scrubber baghouse systems and a limited number of ESP's. The proposed limit requires a significant upgrade in the ESP design. The problem has to do with guaranteed and actual performance. As engineers responsible for the facility we must secure a vendor emission performance guarantee meeting the permit limit. The vendor system guaranteed to meet 0.03 grains/dscf is projected to perform at better than 0.02 grains/dscf, based on tests of similar installations, but a system upgrade adding 15 percent to 20 percent increase in cost is necessary for the vendor to guarantee 0.02 grains/dscf particulate emissions. We request that DER consider the cost impact of the more stringent draft permit limit and that the particulate emission limit be changed to 0.03 grains/dscf.



We request that the economic data presented in Attachments A and B be considered in conjunction with the information provided in the application in making your final BACT evaluation and that due consideration will be given to the LGM comments and requests when preparing the Final Determination and Permit to Construct. It is our understanding that the viability of this NRG Lake County project is very sensitive to the economic impact of your Final Determination. We request that NRG, LGM, and other impacted parties be given the opportunity to meet with you, as we did prior to application submittal, to respond to questions and discuss the issues prior to your making a Final Determination that would jeopardize the project.

Thank you for your consideration.

Sincerely,

LGM ENGINEERS CONSTRUCTORS

Charles P. Wielola

Charles P. Nichols, P.E.

Manager, Environmental Engineering

Enclosure

CPN:BC:jdm

cc: Walt Walters

Bob Chalfant Bob Mayfield



ATTACHMENT A

NRG/RECOVERY GROUP - LAKE COUNTY 2-250 TPD CAPACITY INCINERATORS

OPERATING COST COMPARISON FOR ALTERNATIVE EMISSION CONTROLS BASED ON 120,000 TONS MSW/YR. PROCESSED⁽¹⁾

	Alternative ESP	Alternative Dry Scrubber Fabric Filter	Incremental Cost for Dry Scrubber & Fabric Filter	Incremental Unit Cost
Capital Cost, \$	2,100,000	4,200,000	2,100,000	
Operating Cost	\$1000/yr.	\$1000/yr.	\$1000/yr.	\$/Ton MSW
Amortization ⁽²⁾	301	602	301	2.51
Power (3)	25	125	100	0.83
Labor ⁽⁴⁾	30	120	90	0.75
Maintenance ⁽⁵⁾	42	100	58	0.48
Reagent ⁽⁶⁾		90	90	0.75
Water ⁽⁷⁾		10	10	0.08
Bag Replacement ⁽⁸⁾		60	60	0.50
Waste Disposal (9)		18	18	<u>0.15</u>
Total Cost	398	1125	727	6.05

^{1. 120,000} TPY, contracted amount of MSW to be delivered by County

^{2. 12%} interest, 16 year repayment period

^{3. \$0.06/}kwh, uniform annual power sales value

^{4. \$30,000/}man year

^{5.} ESP 2%, BH 1%, spray dryer system 3% of capital cost

^{6.} Pebble lime \$75/ton

^{7. \$1/1000} gallon

^{8.} Bag replacement 50%/yr., \$50/bag, \$10/installation, approx. 1000 bags/bh

^{9.} Added cost for gas control solids disposal at \$10/ton



ATTACHMENT B

NRG/RECOVERY GROUP - LAKE COUNTY 2-250 TPD CAPACITY INCINERATORS

OPERATING COST COMPARISON FOR ALTERNATIVE EMISSION CONTROLS BASED ON 150,000 TONS MSW/YR. PROCESSED⁽¹⁾

Capital Cost, \$	Alternative ESP 2,100,000	Alternative Dry Scrubber Fabric Filter 4,200,000	Incremental \$ for Dry Scrubber & Fabric Filter 2,100,000	Incremental Unit Cost
Operating Cost	\$1000/yr.	\$1000/yr.	\$1000/yr.	\$/Ton MSW
Amortization ⁽²⁾	301	602	301	2.01
Power ⁽³⁾	25	134	109	0.73
Labor ⁽⁴⁾	30	120	90	0.60
Maintenance ⁽⁵⁾	42	100	58	0.39
Reagent ⁽⁶⁾		113	113	0.75
Water ⁽⁷⁾		12	12	0.08
Bag Replacement ⁽⁸⁾		60	60	0.40
Waste Disposal ⁽⁹⁾		23	23	0.15
Total Cost	398	1164	766	5.11

^{1. 150,000} TPY, 85% capacity factor, maximum expected annual load

^{2. 12%} interest, 16 year repayment period

^{3. \$0.06/}kwh, uniform annual power sales value

^{4. \$30,000/}man year

^{5.} ESP 2%, BH 1%, spray dryer system 3% of capital cost

^{6.} Pebble lime \$75/ton

^{7. \$1/1000} gallon

^{8.} Bag replacement 50%/yr., \$50/bag, \$10/installation, approx. 1000 bags/bh

^{9.} Added cost for gas control solids disposal at \$10/ton

June 25, 1986

TRAT/IRACOVERY (Hroums, 1

Mr. Bill Thomas
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

DER 30N 27 1986 BAQM

Re: DER File No. AC 35-115379

PSD-FL-113

Lake County Waste-to-Energy Facility
Lake County Okahumpka, Florida
Waste-to-Energy Units 1 and 2

Dear Mr. Thomas

It is the studied opinion of NRG/Recovery Group, Inc. that Lockwood Greene Engineers, Inc. and LGM Engineers-Constructors, Inc. have placed very strong emphasis on pollutant emission control in the above mentioned permit application. They have designed, engineered and proposed a facility that is in full compliance with all environmental regulations, poses no adverse impact and no way jeopardizes the public welfare.

The most noticable fact about DER's "Technical Evaluation and Preliminary Determination" (Dated May 20, 1986) is that it at no time suggests our design standards are insufficient or inadequate in any way. In fact the writer hardly mentions the rules, regulations and recognized standards but relies on academic papers written by other authors instead of using fact or logic to justify his requirement for unnecessary and costly equipment changes when the necessity for change was never determined.

I emphatically submit that the electrostatic precipitator proposed meets or exceeds all regulatory requirements and therefore can be considered BACT.

NRG rejects the premise that a baghouse-scrubber is economically feasible!

The elected officials and administration of Lake County seriously investigated the socio-economic questions of solid waste disposal for over a year before entering into a contract with NRG. It is the opinion of NRG that the people of Lake County were well represented by those officials who determined the available funds and budget for waste disposal and that DER's decision that the baghouse-scrubber is economically warranted was made without regard to the facts that were available to and painstakingly considered by the Lake County Solid Waste Study Committee.

I find it difficult to believe that DER could require equipment changes that necessitate a 47 % cost increase in tipping fee and then, in good conscience, make the statement; ".... the cost of using the scrubber-baghouse was not unreasonable compared to using an electrostatic precipitator alone". May I respectfully submit that since no deficiency of design or performance has been suggested, even a 1 % tipping fee increase would be unreasonable, unwarranted and punative.

Mr. Thomas, if NRG is required to use scrubber-baghouse equipment we will be unable to honor the contracted tipping fee and resource-recovery in Lake County will be effectively scuttled by DER.

Crdially yours

All Delta

Walt Walters President



William O. Boyd Mayor

Tony Segreto City Manager JUN 27 1986

June 25, 1986

BAQM

Mr. Bill Thomas
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Fla. 32301-8241

RE: DER File No. AC 35-115379 PSD-FL-113 Lake County Waste to Energy Facility

Dear Mr. Thomas:

This letter is to express my strong support for an energy recovery incinerator for Lake County.

It is my understanding that your department has imposed permit conditions that are more stringent than the State requirements. These additional requirments will increase our landfill cost and I feel that the plant as originally designed is safe, clean and efficient.

Please make every effort to permit this facility as originally designed. Your cooperation on this matter is appreciated.

Sincerely,

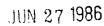
Tony Segreto City Manager



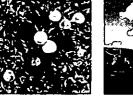


The Complete City





BAQM





June 25, 1986

Mr. Bill Thomas
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

Re: DER File No. AC35-115379 PSD-FL-113 Lake County Waste-to-Energy Facility

Dear Mr. Thomas:

The staff of the City of Leesburg has worked very closely with the NRG Recovery Group, Inc., to make the proposed Waste-to-Energy Facility a reality in Lake County. I personally have attended most all of the meetings where intense negotiations took place to hammer out contracts that were fair, reasonable and economically viable to all parties concerned. Please appreciate that this was no small accomplishment since it involved not only representatives from NRG but Lake County and numerous municipalities, each having their own individual concerns.

I make these statements to highlight the fact that the economics of this project were and continue to be of major concern. The economic factors are two fold. First, the amount of money the cities and others would be charged to dump at the facility represented as a cost per ton and secondly, the charges and cash flow necessary to make the overall project economically feasible, so as to attract investment capital.

In a recent status meeting concerning this project, I learned that the Department of Environmental Regulations is recommending that a dry scrubber baghouse combination be used as the environmental control strategy for this resource recovery facility rather the electrostatic precipitators that were designed into the project and in fact meet or exceed air pollution control standards.

I have two major concerns regarding this requirement. First, I believe DER is exceeding its authority in recommending the use of very expensive air cleaning technology and equipment for a project that as proposed, in fact meets all present air emission standards. Secondly, knowing the concerns expressed in contract negotiations, I believe I speak on behalf of most of the participants. The added capital and operating costs associated with the day scrubber baghouse technology will escalate

Mr. Bill Thomas Bureau of Air Quality Management Department of Environmental Regulation June 25, 1986 Page 2

the cost per ton to a point that the participants will back out of the project due to the increased financial burden.

We earnestly and truly want to see this project serve as a model for the State of Florida and something we can all be proud of. I ask that you not make the dry scrubber baghouse technology a requirement for this project.

Sincerely yours,

Rex Taylor
City Manager

rt:lmd
walter/LDWKII



June 25,1986

CITY OF CLERMONT

P.O. BOX 219 • CLERMONT, FLORIDA 32711 • PHONE 904/394-4081



DER

JUN 27 1986

BAQM

Mr. Bill Thomas Bureau of Air Quality Management Department of Environmental Regulation 2600 Blair Stone Road Tallahassee. Florida 32301-8241

RE: PSD-FL-113

Lake County Waste-to-Energy Facility

Dear Mr. Thomas:

It has been brought to my attention by Mr. Walt Walters, who represents NRG/Recovery Group, Inc., that DER is recommending control equipment that far exceeds the standards set forth by their department. Should additional control equipment be required by DER in order for NRG/Recovery Group to obtain a permit, it will create a hardship upon all the citizens of Lake County. These hardships can be defined as additional tipping fees for the city's garbage disposal, increased cost in garbage collection in the cities of Lake County and would put a greater burden on the landfill problem.

I, as a City Councilman of the City of Clermont, cannot support additional tipping fee costs for our city or increased cost of garbage collection. Therefore, I would recommend that the City of Clermont not participate in the inter-local government agreement with Lake County waste-to-energy program.

Without the participation of the cities in Lake County, this project cannot be constructed. If this project is not constructed the landfill problem is going to become a greater problem than the air pollution in Lake County. If the cities must increase their tipping fees in order to pay for this additional capital outlay, the project is doomed.

Mr. Bill Thomas June 25, 1986 Page 2

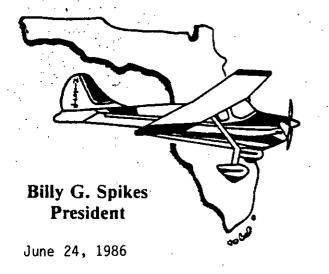
I suggest that the DER seriously reconsider requiring such additional control equipment and allow the NRG/Recovery Group to construct their waste-to-energy facility by today's DER standards.

Very truly yours,

R. L. Huff, Councilman

City of Clermont

RLH/bh



MID-FLORIDA At EUSTIS Inc.

P. 0. BOX 1351 ---- EUSTIS, FL. 32727-1351

(904) 383-2917

DER

JUM 27 1986

BAQM

Mr. Bill Thomas Bureau of Air Quality Management Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, Fl. 32301-8241

Re: DER File No. AC 35-115379 PSD-FL-113

Lake County Waste-to-Energy Facility
Dear Mr. Thomas:

As Chairman of the Lake County Economic Development Council Board of Directors, a businessman and citizen of Lake County, I feel compelled to voice my concern for the possible loss of our "waste-to-energy" project planned for Lake County. Neither the State of Florida nor the County can afford such a loss.

There has to be a better way of handling disposal of trash than through "landfills" and burning trash/producing electric energy seems to be a good solution.

Please do not over-regulate our Lake County Project, but rather allow us to operate under the same rules as other Counties. Increases of \$4.00 to \$5.00 to our planned tipping fee would, no doubt, kill the Project and, with Lake County Landfill already in trouble, everyone would suffer.

Yours, truly,

Billy G. Spikes

cc: Senator Dick Langley
Representative Everett Kelly
Representative Bobby Brantley
Lake County Economic Development
Walt Walters

Michael L. Thibault Vice-President

Betty J. Spikes Secretary-Treasurer



ECONOMIC DEVELOPMENT COUNCIL, INC

Post Office Box 2108 • Leesburg, Florida 32749-2108 • 904/787-5633

DER

JUN 27 1986

BAQM

June 24, 1986

Mr. Bill Thomas
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32301-8241

Dear Mr. Thomas:

The Lake County Economic Development Council has been working for about two years to locate NRG in Lake County so that we can resolve our land fill and disposal problems.

Lake County has been devastated by the economic results of the citrus freeze two years in a row. We have had the highest unemployment of all of the counties and just now are beginning to see some improvement.

Any additional costs that would be added to this project could cause us to lose the project and the ensuing employment it would create, not only on a permanent basis but the many construction people needed to build the generating plant.

We support DER's desire to have quality air control; however, we ask that you do it with due consideration of cost versus the absolute need for a change in specifications.

Sincerely

Executive Director

JEP/mc

cc Steve Vaughn, President
 Richard Huff, President-Elect

THE FLORIDA SENATE

Tallahassee, Florida 32301

COMMITTEES:
Appropriations
Commerce
Judiciary-Civil
Rules and Calendar

SENATOR RICHARD H. LANGLEY REPUBLICAN LEADER 11th District

June 24, 1986

Mr. Bill Thomas Bureau of Air Quality Mangement Department of Environmental Regulation 2600 Blair Stone Road Tallahassee, FL 32301-8241

RE: DER File # AC 35 - 115379 PSD-FL-113

Dear Mr. Thomas:

As a lawmaker in the state Legislature I am really concerned that your agency would go beyond the law in requirements for pollution control. As I understand it, the plans and specs proposed by NRG meet the state requirements.

Mr. Thomas, this plant is vital to our county and DER says it is urgent. I would appreciate your prompt approval and permitting so that the solid waste problem in our county can be dealt with effectively and efficiently.

Your proposal is not supported by law and makes this project no longer feasible. The net result is that our environmental problems are going to worsen if we cannot get this project going.

Your immediate attention to this will be appreciated.

Sincerely,

RICHARD H. LANGLEN Florida Senate

District 11

RHL/ad

DER

JUN 27 1986

BAQM

REPLY TO:

Post Office Box 697, Clermont, Florida 32711 (904) 394-6000

348 Senate Office Building, Tallahassee, Florida 32301 (904) 487-5184

HARRY A. JOHNSTON, II
President

BETTY CASTOR
President Pro-Tempore



JUN 27 1986

BAQM

Florida House of Representatives

Tallahassee

Everett A. Kelly Representative, 46th District

Reply to:

Post Office Box 618
Tavares, Florida 32778
(904) 343-8341
343-9757

 404 House Office Building Tallahassee, Florida 32301 (904) 488-5991 488-5999 June 24, 1986

Committees

Governmental Operations,
Chairman
Regulatory Reform
Professional Regulation Subcommittee,
Chairman
Agriculture
Rules & Calendar

Citrus & Agricultural Funding (Select)

Mr. Bill Thomas
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301-8241

RE: DER File No.AC35-115379
PSD-FL-113
Lake County Waste-to-Energy
Facility

Dear Bill:

This is to express my strong support for the proposed incinerator recovery unit to be constructed in Lake County.

It is my understanding that you have suggested that standards of emission be incorporated into the unit which are even lower than the state statutory standards. That is commendable, but to do so would add costs to the project which would delay its implementation, and put my county on a headlong crash course with your Orlando office.

My county has little choice. They must either put this unit in place as quickly as possible or expend money they do not have to construct a landfill.

If the proposal as written did not meet state standards, I would stand beside you in your suggestion. It does meet statutory standards and there are several units that are being built, or are operational, in the state now.

I would greatly appreciate your allowing this project to go forward by issuing the permit to do so.

I will be happy to meet with you or your air pollution scientists to discuss this matter.

Sincerely.

Everett A. Kelly

Representative, 46th District

EAK/jsb



United States Department of the Interior

FISH AND WILDLIFE SERVICE 75 SPRING STREET, S.W. ATLANTA, GEORGIA 30303

June 23, 1986

Mr. Robert L. Parks, Chairman Attention: Mr. Tom Rogers Environmental Regulation Commission Department of Environmental Regulation 2600 Blairstone Road Tallahassee, Florida 32301

Dear Mr. Parks:

Thank you for sending us a copy of the Technical Review of Permit Application and Preliminary Determination for Lake County Waste to Energy Facility. This facility would be located approximately 70 km east of the Chassahowitzka Wilderness Area. Your early notification of this project is appreciated.

We have reviewed the information you sent us and have concluded that emissions from the proposed facility would not adversely impact the air quality or the air quality related values of the Chassahowitzka Wilderness Area. However, we have several comments regarding the air quality, control technology, and air quality related values analyses contained in the application. These comments are discussed in the enclosed technical review document. We ask that you consider these comments before issuing the final permit.

If you have any questions regarding the enclosed comments, please contact Mr. Bud Rolofson of the Air Quality Division, National Park Service, Denver, Colorado, at (303) 236-8765.

Sincerely yours,

James W. Pulliam, Jr.
Regional Director

Enclosure

JULI 1986

DER

BAQM

Technical Review of Permit Application and Preliminary Determination for Lake County Waste to Energy Facility

bу

The National Park Service Air Quality Division for the U.S. Fish and Wildlife Service

NRG/Recovery Group Inc. (NRG) is proposing to construct a resource recovery facility on a site on Jim Rogers Road near Okahumpka in Lake County, Florida. This location is approximately 70 km east of Chassahowitzka Wilderness Area, a Prevention of Significant Deterioration (PSD) class I area administered by the Fish and Wildlife Service (FWS).

The purpose of the facility is to dispose of solid waste generated in the immediate area. The project will be a mass-burn facility with two 250 ton per day (TPD) refuse fired incinerator/boilers that will generate steam and approximately 12.3 megawatts of electricity. The emissions from the proposed facility are estimated as follows; 60.0 tons per year (TPY) of particulate matter (PM), 547.0 TPY of sulfur dioxide (SO₂), 455.0 TPY of nitrogen oxides (NO_x), 36.0 TPY of volatile organic compounds (VOC), 101.0 TPY of carbon monoxide (CO), 820.0 TPY of hydrogen chloride (HCl), 1.1 TPY of lead (Pb), 5.5 TPY of fluoride (F), 0.0001 TPY of beryllium (Be), 0.6 TPY of mercury (Hg), and 4.0 TPY of sulfuric acid mist (H₂SO₄). Under PSD regulations, these emission rates are considered significant for all except VOC, Be, H₂SO₄ and HCl (which is not a regulated pollutant) and therefore require new source review. Following are our comments on the best available control technology, air quality and air quality related values analyses with respect to the proposed project's impacts on Chassahowitzka Wilderness Area.

BEST AVAILABLE CONTROL TECHNOLOGY (BACT) ANALYSIS

The major sources of emissions at the proposed facility are the two associated boilers. Therefore, our review will focus on emission controls on these units. Our BACT review for the proposed boilers is similar to the reviews we performed for the proposed Collier County and South Broward County resource recovery facilities. These reviews were submitted to the Florida Department of Environmental Regulation (FDER) previously. We again reference the publication entitled, "Air Pollution Control at Resource Recovery Facilities". This document was published in May 1984 by the California Air Resources Board (CARB) and discusses resource recovery facilities in detail. As of 1984, all refuse burning facilities with applications pending in California are proposing control technologies that are the same as, or more stringent than, the guideline emission limits discussed in this report.

For a new major source, a BACT analysis is required for each regulated pollutant emitted in significant amounts. For the proposed facility, the following pollutants will be emitted in significant amounts and require BACT review: PM, SO_2 , NO_x , CO , Pb, F, and Hg.

Particulate Matter

NRG is proposing to use electrostatic precipitators (ESPs) to minimize PM emissions generated by combustion of the solid waste in the boilers. rate proposed by NRG is 0.03 grains per dry standard cubic foot (gr/dscf). The rate determined by the FDER to be BACT and specified in the draft permit is 0.02 gr/dscf. We agree with the FDER that high efficiency control devices such as ESPs or baghouses represent BACT. We also agree that stack testing data for other solid waste incinerators indicate these devices are capable of controlling PM emissions well below the applicant's proposal of 0.03 gr/dscf. However, as we discussed in our review of the proposed Collier County resource recovery facility, we feel a 0.01 gr/dscf rate is BACT. Based on information provided in the CARB document mentioned above, an emission limit of 0.01 gr/dscf can be achieved with high efficiency control devices such as ESPs or baghouses. This is the guideline emission limit proposed by the CARB for new resource recovery facilities in California and should be considered as the BACT limit for Florida facilities as well. The 0.01 gr/dscf rate is also the rate specified in the Maine Department of Environmental Protection's recent license to Penobscot Energy Recovery Company for a resource recovery facility in Orrington, Maine. Therefore, we recommend the FDER specify 0.01 gr/dscf as the PM BACT limit for NRG.

Sulfur Dioxide

NRG is proposing no control devices for limiting SO_2 emissions; rather, they are proposing the firing of low sulfur refuse as BACT for the proposed facility. The resulting BACT limit proposed by NRG is 0.6 pounds per million Btu heat input ($1b/10^6$ Btu). The FDER specified a maximum hourly SO_2 rate of 5.6 pounds per ton (1b/ton) of refuse (2.8 1b/ton for 30 day rolling average). These rates correspond to 0.56 $1b/10^6$ Btu and 0.28 $1b/10^6$ Btu for hourly and 30 day averages, respectively.

As an alternative to the proposed low sulfur refuse firing, NRG discussed the spray dryer scrubbing system, which could achieve at least a 70 percent reduction in SO_2 emissions and a 90 percent reduction of acid gases. NRG decided against the spray dryer system because of the added costs associated with such a system. NRG estimated the incremental cost for SO_2 and acid gas removal at \$1,200 per ton of pollutant removed, and felt that such costs would impose an unreasonable economic burden on the residents of Lake County.

In North Broward County's recent application for a resource recovery facility, they pointed out that the EPA, in evaluating the costs/benefits of various control technologies, uses economic indicators such as dollars per ton of pollutant removed. North Broward County references \$1,250-\$2,000 per ton of SO₂ removed as the range the EPA considers as reasonable. Therefore, since the \$1,200 per ton rate quoted by NRG is less than the lower end of the EPA range, the costs associated with a dry scrubber system appears to be reasonable.

In addition, the emission guideline recommended in the CARB document is 30 ppm, which corresponds to an SO_2 emission rate of approximately 0.08 lb/ 10^6 Btu. To achieve this emission level, which is significantly more stringent than the rate required of NRG, flue gas controls such as wet or dry scrubbing

are required. Dry scrubbing processes have been effectively employed at pilot and full-scale refuse burning facilities in Europe, Japan, and the United States. Wet scrubbers have also been employed at full-scale refuse burning facilities. Also, applicants for two resource recovery facilities in Maine recently proposed the use of spray dryer scrubbers to minimize $\rm SO_2$ and acid gas emissions. The resulting $\rm SO_2$, emissions from the PERC facility referenced above were estimated to be $0.067~\rm lb/10^6~\rm Btu$ after the scrubbing. The $\rm SO_2$ emissions from Regional Waste Systems' (RWS) proposed facility in Portland, Maine, were estimated to be $0.074~\rm lb/10^6~\rm Btu$.

The FDER indicates that the installation of a flue gas scrubbing system to control SO_2 emissions alone is not warranted when burning municipal solid waste. Therefore, the SO_2 permit limits for the NRG facility appear to be based on burning of low sulfur refuse. However, in the BACT analysis for acid gas emissions, the FDER concludes BACT for control of acid gases is a flue gas scrubber system or similar technology. The FDER also indicates that the installation of an acid gas removal system would also provide control for SO_2 emissions. Therefore, because the FDER is requiring flue gas scrubbing for control of acid gases, and SO_2 emissions will also be reduced with this system, we recommend the FDER specify SO_2 permit limits that reflect the SO_2 reductions achievable with a flue gas scrubbing system, and are comparable with the above CARB limit.

Nitrogen Oxides and Carbon Monoxide

The two primary variables that affect the formation of NOx from resource recovery boilers are the temperature and the concentration of oxygen in the combustion zone. NRG is proposing design and good combustion practices as NO. BACT. Combustion controls include use of low excess air, limiting peak combustion temperature, and good air/fuel mixing in the combustion chamber. FDER determined that a NO $_{\rm x}$ emission rate of 5.0 lb/ton (0.50 lb/ 10^6 Btu) rep-We agree with the FDER that the proresents BACT for the proposed facility. posed use of combustion controls represent BACT. However, based on information presented in the CARB report and other reports referenced in North Broward County's recent PSD application, we feel combustion controls can reduce NO_X emissions to the 3.0 lb/ton or lower range. For example, on page 4-10 of North Broward County's PSD application it states that Camp, Dresser and McKee (1984) reported emission factors for five operating solid waste fired facilities in the United States ranging from 2.1 to 4.6 lb/ton. Three other facilities were permitted at a rate of about 3.0 lb/ton. The application also states that Henningson, Durham, and Richardson (1985b) surveyed eleven solid waste incinerators throughout the United States and found $\mathrm{NO}_{\mathbf{x}}$ emissions ranging between 1.1 and 4.7 lb/ton. In addition, A.D. Little's (1981) survey showed emissions to range from 0.7 to 4.4 lb/ton. Based on this information, we feel a 3.0 lb/ton or lower NO_x emission limitation represents BACT.

CO emissions result primarily from incomplete combustion. NRG is proposing as BACT a combustion control system that will insure sufficient mixing of the solid waste fuel and air so that the emissions of products of incomplete combustion are minimized. We agree with the FDER that the proposed combustion controls represent BACT for CO emissions from the proposed facility.

Other Pollutants

Other pollutants emitted from the proposed facility that require BACT review include, Pb, F, and Hg. In addition, although presently not a regulated pollutant, significant amounts of hydrogen chloride (HCl) can be emitted from municipal incinerators and should be minimized.

Lead is emitted in the solid phase. Therefore, the ESPs proposed to control PM emissions will also control lead emissions. We agree that the proposed ESPs represent BACT for lead emissions.

Fluorides, and HCl are emitted primarily in the gaseous phase. NRG did not propose additional controls for these pollutants. However, the FDER determined that installation of a flue gas scrubbing system or similar technology is BACT for acid gas removal. We agree with the FDER that such a system represents BACT for these pollutants.

Finally, regarding mercury emissions, there appears to be an inconsistency between the proposed maximum emissions and the rate specified in the draft permit. In Table 1 of the FDER's technical evaluation, the FDER proposed maximum annual mercury emission rate is listed as 0.6 tons per year. However, specific condition 4(j) of the draft permit lists the maximum allowable mercury emissions as 3200 grams per day, which corresponds to 1.29 tons per year. Condition 4(j) should be revised to allow only 1493 grams per day, which corresponds to the proposed 0.6 ton per year rate.

AIR QUALITY ANALYSIS

The ISCST model was used to predict maximum short and long-term air quality impacts in the vicinity of the proposed resource recovery project and in the Chassahowitzka Wilderness Area (CWA). The proposed project is predicted to add 4.3, 0.8 and 0.04 micrograms per cubic meter (ug/m^3) of SO₂ for the 3hour, 24-hour and annual averaging times to CWA. NRG states they are the only increment consuming source in the area. If this is true, these levels represent the total class I increment consumption at CWA. These levels represent 2%, 16%, and 17.2% of the 3-hour, 24-hour, and annual allowable increment, respectively. Background concentration levels were not provided in the permit application (but were assumed to be very low in the area). Therefore, total concentration (background plus increment consuming sources) levels in CWA could not be determined. Any future applications in this area should include a detailed cumulative analysis in order to keep track of increment consumption in CWA. Accurate annual average concentration values (from all sources) are essential in assessing potential air quality impacts in CWA.

We would like to know if NRG is indeed the only increment consuming source in the area. In 1981 we received PSD applications for the Florida Mining Portland cement plant located 7 miles from CWA, the Tampa Electric power generating facility located 56 miles from CWA, the Transgulf Pipeline Company petro products transfer terminal located 70 miles from CWA, the Conserve Inc. sulfuric acid plant located 97 km from CWA, the City of Tampa refuse to energy project located 89 km from CWA, and the Brewster Phosphates rock dryer fuel conversion plant located 100 km from CWA.

Maximum concentrations for Pb were calculated by ratioing the SO_2 impact analysis results giving an annual and 24-hour averaging concentration value of 0.002 and 0.06 ug/m³, respectively. No further analysis was done for Pb in CWA. The only non-criteria pollutants being emitted in significant amounts are Hg and F $^-$. The applicant did not do a modeling analysis for these pollutants.

On page 44 of the application the applicant indicates no further modeling for NO₂, PM or CO was required because the maximum predicted concentrations for each pollutant was less than their significant impact levels. It appears the applicant is misinterpreting EPA's meaning of "insignificant". Referring to the significant levels EPA states, "... since the 1977 Amendments provide special concern for class I areas, any reasonably expected impacts for these areas, must be considered irrespective of the 50 kilometer limitation or the above significance levels". (See June 19, 1978, Federal Register, Page 26398). Since the proposed facility is to be located near CWA, a class I area, the applicant should not be referencing the EPA significant levels, and should perform a cumulative air quality analysis including the proposed source and previously permitted sources for all pollutants from this facility subject to PSD review.

A level-1 visibility analysis was performed and indicated that the proposed project would not cause visibility impairment in CWA.

AIR QUALITY RELATED VALUES ANALYSIS

The CWA is comprised mainly of estuarene salt marshes, tidal streams and shallow bays with a border of hardwood swampland. The refuge was established for the purpose of migratory bird conservation. The CWA provides habitat for 6 federally threatened and endangered species — the American alligator, the bald eagle, eastern brown pelican, eastern indigo snake, Florida manatee, and the green turtle.

The proposed project would add low amounts of SO_2 to the CWA. Without the background levels present in the area, it is difficult to determine what the impact on the resources of CWA would be. If the background levels are indeed low, the emissions from the proposed source would not adversely affect the resources. We would appreciate receiving any information FDER may have on the SO_2 levels in the area.

In the winter of 1983/84, a freeze destroyed the upper canopy of the black mangroves in CWA. This is a favorite nesting area for the federally listed endangered eastern brown pelican. Until these trees recover, the breeding population of eastern brown pelicans has been displaced north to Cedar Keys National Wildlife Refuge (Cedar Keys). Cedar Keys is already one of the major breeding areas for the eastern brown pelican. In 1983 a peak population of 1775 birds produced 1750 offspring, and in 1985, a peak population of 1500 birds produced 1050 birds.

Although Cedar Keys is a class II area, it is extremely important as a breeding ground. We would like to request that future PSD permit applications in the area of Cedar Keys be forwarded to our office for review, and address the effects of the proposed project on the resources of Cedar Keys.

CONCLUSION

Based on the information provided, we would not expect emissions from the proposed facility to adversely impact the air quality or air quality related values of Chassahowitzka Wilderness Area. However, the following comments regarding the proposed control technology and air quality analyses which summarizes our review should be addressed before the PSD permit is granted for the proposed project. We would appreciate receiving responses to these comments prior to issuance of the final permit.

- o The PM emission rate of 0.01 gr/dscf is achievable and should be considered BACT for PM for the NRG facility.
- o A $\rm SO_2$ emission rate of 0.08 $\rm 1b/10^6$ BTU is achievable with the flue gas scrubbing system that FDER is requiring for control of acid gases and $\rm SO_2$ emissions and should be specified as a permit limit for the NRG facility.
- o A 3.0 lb/ton or lower NO_{X} emission limitation by using combustion controls should be specified as BACT for the NRG facility.
- o Condition 4(j) in the draft permit should be changed to allow only 1493 grams per day of mercury emissions. This corresponds to the maximum annual mercury emission rate of 0.6 tons per year.
- o A cumulative analysis should be done for all increment consuming sources in Chassahowitzka Wilderness Area (CWA).
- o Maximum concentration values for NO2, PM and CO should be predicted in CWA as the significant impact levels do not apply when class I areas involved.
- o Background levels for each pollutant should be provided, particularly for SO_2 , in order to fully assess the potential impacts of this facility on air quality related values at CWA.

LITERATURE CITED

- A.D. Little, Inc. 1981. Municipal Incinerator Emission Estimates.
- Camp, Dresser & McKee, Inc. 1984. Solid Waste Energy Recovery Facility Application for Power Plant Site Certification, Hillsborough County Board of County Commissions.
- Henningson, Durham, and Richardson. 1983. Revised Application for Power Plant Siting, for the Third Boiler Expansion at the Pinellas County Resource Facility.



city of eustis, florida

P.O. DRAWER 68 EUSTIS, FLORIDA 32727-0068

June 23, 1986

DER

HIM 25 1988

Mr. Bill Thomas
Bureau of Air Quality Management
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32301-8241

BAQM

Re: DER File No. AC35-115379 PSD-FL-113 Lake County Waste-To-Energy Facility

Dear Mr. Thomas:

The City of Eustis supports the permitting of the Lake County Waste-to-Energy Facility.

The City of Eustis in conjunction with other municipalities has entered into interlocal agreements with the Lake County Board of County Commissioners to deliver waste to the facility in order to insure sufficient volume for economic operation of the facility and to encourage a more environmentally safe disposal system over the present landfill. The cities and Lake County have entered into agreements to place on line an economical and environmentally appropriate waste-to-energy facility for Lake County. The proposed waste-to-energy facility meets the required environmental standards of federal, state and local agencies at a reasonable cost to the consumer and the local governments involved. Your agency's demand that the contractor alter the design of the facility to delete the electrostatic precipitators and install in their place a dry scrubber baghouse would increase the cost to the units of local government and citizens to the point of the project no longer being feasible. A forty-seven percent increase in cost of disposal is not an insignificant amount. If the design of the proposed facility does indeed meet the required environmental standards, then your agency's requirement for more stringent controls is not warranted. Local, state and federal agencies have the power to require a facility to retrofit if they are violating standards after permit issuance. Requiring dry scrubber baghouse in lieu of the electrostatic precipitators may be desirable from your agency's point of view, but if they are not necessary to the meeting of standards, you are imposing a stringent economic cost to the citizens of the community without cause.

Lake County needs resource recovery/disposal systems and is desirous of having them in order to maintain a safe living environment for its citizens. However, implementing resource recovery and disposal systems must be done in light of both the environmental and economic considerations and impact upon the public.



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I would appreciate if you would read and place my letter into the public record file for the public hearing concerning the permitting of this facility.

Sincerely,

Michael G. Stearman

City Manager

MGS:mo

cc: City Commission

Board of County Commissioners

Senator Langley Rep. Brantley Rep. Kelly

NRG Recovery Group, Inc.

I'm writing to voice my opinor on the NRG plant planned for abahumpha. I live in abahumpha and have for years. I was a member of a community meeting a few mount to ago hear in abahumpha. At the meeting were a representative from the NRG waste-recovery Plant and a count official.

At the meeting the Plant Rep total us about hew clean the plant is and how the Sollutants where almost non-existent because of the intens heat, complete burning, and the filtering systems in the plant.

According to the Seesling Commercial the almost "non-existent pollutants" Sum up to be "1200 TONS EXCH YEAR" and an increase of "256 TONS OF SULFUR DIOXIDE"

"456 TONS OF KITROGEN OXIDES "CARBOH MONOCIDE 412 TONS "HYDROCARBONS 37 TONS per year often opperature begins.

The DER says "That the air (2) quality in the country well not suffer. That's quete a statement. How can That amount of pollutants be. dumped into the sir and not have an impact? SER also states "the residents in Obahumpho should not notice a defference in our air well thanks alot, what if you're wrong? What of the plant goes into operation and the fumes from it burnes our eyes or smells or worse? When well the DER be then and what will they Day? "Dony folks in abahumpha but thats the breakes, we made a mistake.

This slosen't relate to the Pollution problem but it seems a rip off, that the refuse companies have to pay the NRG plant to take their garbage and then the plant uses this as fuel for their benefet to generate electricate to sell to the power company. Now that's a no lose setuation for sure and on top of that they can pollute the air with the country's and DER'S blessings, what a deal!

live in abalungha.

Bill Thomas at DER
Jun 12276

Jun 1 Lowers Office BuilDing
JEOU Blair Stone RD.

Jallahassee Fla.
33301-8341



DER JUN 23 1986 BAQM

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DEPARTMENT OF ENVIRONMENTAL REGULATION

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Waste facility receives initial DER approval

By MERRIE SKINNER of the Leesburg/Commercial

TAVARES

The Florida Department of Environmental Regulation has given preliminary approval of construction plans for the NRG waste-recovery plant in Okahumpa.

In a letter to Lake County commissioners that arrived in Tayares last week, the deputy chief of DER's air-quality management bureau said the department intends to grant a construction permit for the plant. NRG plans to burn garbage at the plant in order to generate power for resale to an electric utilities company.

Before making a final decision on NRG's request for a construction permit, DER is allowing 30 days for public comment on the proposal. Comments can be mailed to Bill Thomas at DER, Twin Towers Office Building, 2600 Blair Stone Road, Tallahassee, Fla., 32301-

According to DER, the plant will put more than 1,200 tons of pollutants into the air each year. These pollutants include carbon monoxide, sulfur dioxide, nitrogen oxides and hydrocarbons.

DER estimates show that air pollutants will increase each year by the following amounts after the plant is in operation:

 Particulate matter, which is suspended material similar to dust, will increase by 41 tons.

Please see NRG, page 10A

NRG

Continued from page 1A

• Sulfur dioxide will increase by 256 tons.

• Nitrogen oxides in the air will increase by 456 tons.

 Carbon monoxide will rise by 412 tons.

 Hydrocarbons will increase by 37 tons.

A ton is equivalent to 2,000 pounds.

Nitrogen oxides, carbon monoxide and hydrocarbons are components of automotive exhaust vapors. Nitrogen oxides and sulfur oxide are also associated with acid rain, while hydrocarbons react in sunlight with other components of the air to form ozone, a toxic, corrosive substance. Ozone is believed to irritate eyes and, in large amounts, can cause the early aging or decomposition of plastics.

Although the plant is expected to generate more than 2,400 pounds of air pollutants yearly, DER officials say the actual impact on Lake County's air quality will be minimal.

Tom Sawicki, DER air engineer in Orlando, said the plant's emissions will be much lower than the maximum allowed levels set by law. He also said that local residents should not notice a marked change in the quality of the air they breathe after the plant begins operating.

"The air quality there (in Lake

County) is good. The amount of degradation will be relatively small," Sawicki said.

The proposed \$24.6 million plant, which will include two 250-tonsper-day incinerators burning municipal waste and wood chips, is planned for a two-acre site in the Rogers Industrial Park. The park is located off State Road 33, about a mile south of Okahumpka.

Construction is expected to begin next month, with the plant opening for business in December 1987

County officials say that about a year after the plant opens the county will consolidate its four landfills into one main landfill in Astatula. Under a 17-year contract with NRG, the county has agreed to provide the company with at least 140,000 tons of solid waste per year to help fuel the incinerators.

This means that household garbage will no longer be buried underground in Lake County. Only items such as large appliances and animal carcasses will be buried at the Astatula landfill rather than burned at the NRG plant. Hazardous wastes will not be allowed at either the recovery plant or the landfill and will have to be hauled to out-of-state hazardous-waste dump sites.

About 200,000 tons of garbage, are now dumped at the county's four landfills each year.

P.O. Box 815-Tavnes, Fl. 32778-0815-

DER

art 23 1986

JAQM

Mr. C. H. Fancy, P.E.

Deputy Chief

Brun of Rin Quality

Management

Flavila Dept. of Euroinmental Regulation

Twin Tamers Office Blog.

2600 Blain Stæne Rd.

Tallahane, Fl. 32301-8241

Re: Public Notice - MRG/Recovery Group Waste-to-Energy Facility, Lake County

Dear Mr. Fancy:

set is the intent of this letter to living to your attention several serious aspects of the referenced project that I feel have not been properly addressed to date.

In reviewing the information pravided in the public notice, are is to assume the air quality

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of the Community of OKahumpka will be impacted by particulate matter on the order of 224.66 pounds per day. Sulfur diaside will increase by 1402.7 pounds a day. Oxide of nitrogen (notice daws not indicate spirific exides) will be increased to 2498.6 pounds a day. Carbon manaxide will increase by 2257.5 pounds a day. Thus far, from the list of air pollutants stated in the information mode available to the public, il recognize measurements marmacly associated with motor which emission. What base information of measurement is being used to determine the compact to ambient air quality by your department? The reason this is significant; within the immediate vicinity of the proposed location of the waste-to energy facility are three major country highways C-33, C-48, and C-470 which converge in the center of the community of OKahumaka. The semitractor-trailer traffic on these country woods is tremidously heavy at the present time due to limerack and asphalt plants lacated on highway 470 and a limerack and sand mine lacated on highway 48 in Center Hill. Highway Canetruction and concrete products plants in and east of Lake County cely on these plants for sinduct materials. Let would be impassible to describe the amount of heavy truck traffic on these roads strong up road dust and sand, all canverging on the intersection of C-33, C-48, and C-470 which is in the center of the Community of O Kahumpka. This alove is already a major problem. To the west of this major traffic intersection is the Florida Turnpike which continually mover tremendance numbers of rehicles toward and from sauch Harida. Attached is a Copy of the Flanda D.O.T. road map with

Lo. Box 815 Tavar, \$1. 32778-0815



DER

JUN 23 1986

BAQI...

Mr. C. H. Fanoy P.E. Deputy Chief Berran of air Quality Management Berran of Air Quality Management Florida Sept. g Enviarmmental Ryulation Town Towners office Blog. Town Towners office Blog. 7600 Blair Stone Road Tallahance, Ilanda 32301-8241 there peatines shown.

The present vehicle traffic, as described above, is significantly deteriorating the air quality in the Okahungska area; not & mention the air emission from the rock and sand miner, the asphalt slant, and U.S. Nighung 27 to the east of Okahumpaka. Has a traffic study been performed to determine what impact the garbage trucks Coming into the area to the waste-to-energy plant will have on an already annhaded highway system? What are the present air poelution levels in the OKahumpka area for particulate matter, sulfur cleaside, Oxides of nitrogen, and carbon monoxide? Ils the Dept. of Enviornmental Regulation basing a decision on issuing an air pollution source servit on data Callected in other areas of Lake County, or in the immediate area of impact?

The remainder of the air pollutants, valitile organice compounds, at 202.74 pounds a day, will obviously the most potentially blarmful health risk possed by emissions from the waste-to-energy plant and should found in the public notice information does not identify what the levels of diexins, furans, and other non-criteria pollutants that are known to be emitted by waste-to-energy plants will be. I here pollutants do not have established Federal as state standards.

How can an agency of state government issue a permit for a Known source of air parlution that has yet to determine a level of measurement for non-criteria parlutants that has been documented as a Known hearth rick?

The Cancentration of lead was advised in the information; to be 2.74 pounds a day. This doe not seem advisable when it is abvious lead addition are being removed from automobile gasaline sold to the general public. The flourides emitted will result in 3.29 pounds a day being released into the atmosphere. In what form will this flouride be in?

The last element described in the notice is beryllium at 9.2 ×10-5 tons a year on . 000 5041 pounds a day. This appears to be an insignificant amount, but what will beryllium do to plants, animals, and humans, at any minute exporme levels, over a long period of time? The Florida Dept. of Enviornmental Regulation is telling the general Public that the proposed waste to energy plant well Compact their health, but by what degree, in what areas, to what extent, as compared to what hearth standards? what lang term effects will these air pallutants have On the people living in the area, the mick produced fram Platte Dairy lacated on C-470, Lashen milling aplastian, which is a major supplier of livestock feeds to farming aperation in a three country area? These are questions that all need to be addressed on the "frant end" of this project.

From the information made available at the Seahung Public Libarry, I forsee the creation of a heavy industrial air southern source if the waster-to-energy is constructed at the stappased location in Okahungeka. Having seen these heavy industry areas in the major cities of our nation, I smooth strongly object to allowing this project to be serviced by the State of Floride. I object to breathing air containing approximately 6600 sounds of Known air pollutants each day.

end: I copy of DOT map.

Sincirely, Kolard Sewin Okahumpka Resident



June 11, 1986 1P.O. Box 386 Lake Panasoffkee Horida 33538 Mr. Bill Thomas Florida Department of Environmental Regulation Turn Towers Office Building 2600 Blair Stone Road D. E. R. Talla Lassee, Floreda 32301-8241 SOUTH WEST LISTRICT Dear Mr. Thomas We already have a pollution 19823 plant" in our immediate area 3AQI (the Rock Mine between Okahampka and Sumterville), so we don't need another. It provides us - in our formerly pristine surroundings - with a very generous daily layer of fine dust, which water our screens, windows, cars, etc., etc. We live on the lake front; we have water or grass and trees in every direction; we are not troubled by dusty roads in our nightorhood get we still get this daily layer of I uge that the DER disapprove The plans for the proposed TRY abste- recovery plant in Okahumpka. any good that might come from the plant would be outweighted by the environmental damage that would certainly result. Sincerely Edgar W. Somberlin

MR EDGAR W TOMBERLIN PO BOX 386 LAKE PANASOFKE FL 33538





Mr. Bill Thomas

DER

Juin Towers Office Bldg
2600 Blair Stone Koad

Jallahassee

Ilorida 32301-8241

4/7/86

P.O. Box 437 Okakumpka, Fla. 32762

Dear Mr. Thomas,

Leasung Commiscial, that the proposed

NRB wastericovery plant in Okahumpka,

would dump some "1200 Tone" of pollutants.

into the air each year. This 1200 tone

may be much lower than maximum

levels, but its too much for my nostile.

xl am for the plant, but not for

the high levels of pollutants (poisons) that

go with it.

cl would appreciate any further

information that may develop affecting

my community.

DER JIN 11 1986 BAQM Thank you. Sincerely, Naved M. Moulton P.O. Box 437 Okahumpka, Fla.
32762

Bill Thomas

Word

Bept. of Environmental Rag.

9861 11 Mg

2600 Blair Stone Rel.

Jallahassee J. J. La.

32301-8241

Lake Region News

Published Weekly Eustis, Lake County, Florida

Before the undersigned authority personally appeared Frederick C. Drew,

who on oath says that he is General Manager of EUSTIS LAKE REGION NEWS.

a weekly newspaper published at Eustis, in Lake County, Florida; that the

STATE OF FLORIDA, COUNTY OF LAKE:

attached copy of advertisement	,
being aNOTICE	in the matter of
PROPOSED AGENCY ACTIO	ON ON PERMIT APPLICATION
NRG/Recovery Group	
in the Circuit newspaper in the issues of:	Court, was published in said
May 31,198	<u>6</u> 19.
10	10

Affiant further says that the said Eustis Lake Region News is a newspaper published at Eustis, in said Lake County, Florida, and that the said newspaper has heretofore been continuously published in said Lake County, Florida, each week and has been entered as second class mail at the post office in Eustis, in said Lake County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person, firm or corporation any discount, rebate, ... commission or refund for the purpose of securing this advertisement for publication

in the said newspaper.

Sworn to and subscribed before me this Notary Fulfic, State of Florida at Large 1986. My commission expires August 22, 1987 PROOF OF PUBLICATION

State of Florida Department of Environmental Regulation Notice of Proposed Agency Action on Permit Application

The Department of Environmental Regulation gives notice of its intent to issue a permit to NRG/Recovery Group to construct two 250 ton per day incinerators that will burn municipal solid waste and wood chips. The project will be located on Jim Rogers Road, Okahumpka, Lake County, Florida. A determination of best available control technology (BACT) was required.

This application was reviews under Florida Administrative Code Rule 17-2.500, Prevention of Significant Deterioration. Emissions of air pollutants, in tons per year,

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project will be as follows:

• •	Annual	24-Hour	3-Hour	
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SO2 Class II PM	⊲ 5	5	N/A	
SO2	5	23	10	

DER

Persons whose substantial interests are affected by the department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57. Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitutes a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this preliminary statement. Therefore, persons who may not object to the proposed agency action may

wish to intervene in the proceeding. A petition for intervention must be filed pursuant to Model Rule 28-5.207 at least five (5) days before the final hearing and be filed with the hearing officers is one has been assigned at the Division of Administrative Hearings, Department of Administration, 2009, Apalachee Parkway, Tallahassee, Florida 32301. If no hearing officers has been assigned, the petition is to be filed with the Department's Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32301. Failure to petition to intervene within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, Florida Statutes,

The application is available for public inspection during normal business hours. 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at: Dept. of Environmental Regulation St. Johns River District

3319 Maguire Blvd., Suite 232 Orlando, Florida 32803 Dept. of Environmental Regulation Bureau of Air Quality Management 2600 Blair Stone Road Tallahassee, Florida 32301

Leesburg Library 204 N. 5th Street Leesburg Florida

any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahasses address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.

June 2, 1986

In reference to AC-35-115379

PSD-FL-113

DER
JUN 3 1986
BAQM

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DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING 2600 BLAIR STONE ROAD TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM GOVERNOR VICTORIA J. TSCHINKEL SECRETARY

May 21, 1986

Chassahowitzke National Wildlife Refuge Route 2, Box 44 Homosassa, Florida 32646

RE: Preliminary Determination - NRG/Recovery Group Waste-to-Energy Facility, Lake County

I wish to bring to your attention that NRG/Recovery Group proposes to construct a solid waste energy recovery facility in Lake County, Florida, and that emissions of air pollutants will thereby be increased. The Florida Department of Environmental Regulation, under the authority delegated by the U.S. Environmental Protection Agency, has reviewed the proposed construction under Federal Prevention of Significant Deterioration Regulations (40 CFR 52.21) and reached a preliminary determination of approval, with conditions, for this construction.

Please also be aware that the attached Public Notice announcing the preliminary determination, the availability of pertinent information for public scrutiny and the opportunity for public comment will be published in the near future in a newspaper of general circulation in Lake County. This notice has been mailed to you for your information and in accordance with regulatory requirements. You need take no action unless you wish to comment on the proposed construction. If you have any questions, please feel free to call Mr. Bill Thomas or myself at (904)488-1344.

Sincerely,

C. H. Fancy, P.E.

Deputy Chief

Bureau of Air Quality

Management

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING 2600 BLAIR STONE ROAD TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM GOVERNOR VICTORIA J. TSCHINKEL SECRETARY

May 21, 1986

U.S. Fish and Wildlife Service Region 4 Richard B. Russell Federal Building 75 Spring Street Atlanta, Georgia 30303

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C. H. Fandy, P.E. Deputy Chief

Bureau of Air Quality

Management

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING 2600 BLAIR STONE ROAD TALLAHASSEE, FLORIDA 32301-8241



May 21, 1986

BOB GRAHAM GOVERNOR VICTORIA J. TSCHINKEL SECRETARY

Withlachoochee Regional Planning Council

Dear Mr. Mins:

Mr. James D. Mins

1241 S.W. 10th Street Ocala, Florida 32674

Preliminary Determination - NRG/Recovery Group Waste-to-Energy Facility, Lake County

I wish to bring to your attention that NRG/Recovery Group proposes to construct a solid waste energy recovery facility in Lake County, Florida, and that emissions of air pollutants will thereby be increased. The Florida Department of Environmental Regulation, under the authority delegated by the U.S. Environmental Protection Agency, has reviewed the proposed construction under Federal Prevention of Significant Deterioration Regulations (40 CFR 52.21) and reached a preliminary determination of approval, with conditions, for this construction.

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H. Farcy, P.E.

Deputy Chief

Bureau of Air Quality

Management

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING 2600 BLAIR STONE ROAD TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM GOVERNOR VICTORIA J. TSCHINKEL SECRETARY

May 21, 1986

Mr. Ron Fahs
State A-95 Coordinator
Florida State Planning and
Development Clearinghouse
Office of Planning and Budget
The Capitol
Tallahassee, Florida 32301

Dear Mr. Fahs:

RE: Preliminary Determination - NRG/Recovery Group Waste-to-Energy Facility, Lake County

I wish to bring to your attention that NRG/Recovery Group proposes to construct a solid waste energy recovery facility in Lake County, Florida, and that emissions of air pollutants will thereby be increased. The Florida Department of Environmental Regulation, under the authority delegated by the U.S. Environmental Protection Agency, has reviewed the proposed construction under Federal Prevention of Significant Deterioration Regulations (40 CFR 52.21) and reached a preliminary determination of approval, with conditions, for this construction.

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Sincerely,

C. H. Rancy, P.E.

Deputy Chief

Bureau of Air Quality

Management

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING 2600 BLAIR STONE ROAD TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM GOVERNOR VICTORIA J. TSCHINKEL SECRETARY

May 21, 1986

Mr. Erick Erickson Director Leesburg Library 204 N. 5th Street Leesburg, Florida 32748

Dear Mr. Erickson:

RE: Preliminary Determination - NRG/Recovery Group Waste-to-Energy Facility, Lake County

The Bureau of Air Quality Management needs to make the enclosed information available for public inspection pursuant to Federal Prevention of Significant Deterioration Regulations (40 CFR 52.21, Paragraph (q)). A notice directing people to the library will be published in a local newspaper in the near future.

The information must be available upon request for a period of at least 30 days from the notice date. At the end of the period, we will forward to you a Final Determination on the permit application which must be available for an additional 30 days.

We appreciate your help in providing this valuable public service, and your assistance does not necessarily constitute an endorsement of the project. Should you have any questions, please call me at (904)488-1344.

Sincerely,

C. H. Fancy, P.E.

Deputy Chief 'Bureau of Air Quality

Management

CHF/pa

Enclosure

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING 2600 BLAIR STONE ROAD TALLAHASSEE, FLORIDA 32301-8241



GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

BOR GRAHAM

May 21, 1986

Lake County Board of County Commissioners 315 W. Main Street Tavares, Florida 32778

Dear Commissioners:

RE: Preliminary Determination - NRG/Recovery Group Waste-to-Energy Facility, Lake County

I wish to bring to your attention that NRG/Recovery Group proposes to construct a solid waste energy recovery facility in Lake County, Florida, and that emissions of air pollutants will thereby be increased. The Florida Department of Environmental Regulation, under the authority delegated by the U.S. Environmental Protection Agency, has reviewed the proposed construction under Federal Prevention of Significant Deterioration Regulations (40 CFR 52.21) and reached a preliminary determination of approval, with conditions, for this construction.

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Sincerely,

C. H. Fancy, P.E.

Deputy Chief

Bureau of Air Quality
Management

State of Florida Department of Environmental Regulation Notice of Proposed Agency Action on Permit Application

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This application was reviewed under Florida Administrative Code Rule 17-2.500, Prevention of Significant Deterioration. Emissions of air pollutants, in tons per year, will increase by the following amounts:

<u>PM</u>	\underline{so}_2	$\underline{NO}_{\mathbf{X}}$	<u>CO</u>	<u>voc</u>	<u>Pb</u>	<u>F1</u>	<u>Be</u>
41	256	456	412	37	.5	. 6	9.2 x E-5

The maximum percentages of allowable PSD increments consumed by the proposed project will be as follows:

	<u>Annual</u>	24-Hour	3-Hour
Class I			
PM SO ₂	<<20 <<50	<10 20	N/A 16
Class II			
PM SO ₂	<5 5	5 23	N/A 10

Persons whose substantial interests are affected by the department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must conform to the requirements of Chapters 17-103 and 28-5, Florida Administrative Code, and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Twin Towers Office Building, Tallahassee, Florida 32301, within fourteen (14) days of publication of this notice. Failure to file a request for hearing within this time period shall constitutes a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

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The application is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Dept. of Environmental Regulation St. Johns River District 3319 Maguire Blvd., Suite 232 Orlando, Florida 32803

Dept. of Environmental Regulation Bureau of Air Quality Management 2600 Blair Stone Road Tallahassee, Florida 32301

Leesburg Library 204 N. 5th Street Leesburg, Florida

Any person may send written comments on the proposed action to Mr. Bill Thomas at the department's Tallahassee address. All comments mailed within 30 days of the publication of this notice will be considered in the department's final determination.