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23 Sept 87
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LGM ENGINEERS CONSTRUCTORS

A LOCKWOOD GREENE COMPANY

85463.02

September 22, 1987

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

RE: NRG/Recovery Group
Lake County Waste to Energy Facility

Dear Mr. Andrews:

Enclosed are permit conditions that have been negotiated with U.S. EPA Region IV. We intend to request modification of permit conditions for the NRG facility to incorporate these conditions, with possible minor modifications.

I will call to discuss any comments you may have regarding these conditions and to confirm submittal requirements.

Sincerely,

LGM ENGINEERS CONSTRUCTORS

Robert V. Chalfant

Robert V. Chalfant, P.E.
Environmental Department
404/888-1595

RVC:vd

Enclosures

cc: M. Colvin
L. Oakes

DER
SEP 25 1987
BAQM

cc: [illegible] 9/25/87

LGM, INC. / 1330 West Peachtree Street, NW / Atlanta, Georgia 30367-6501 / (404) 873-4867

LOCKWOOD GREENE
Planners/Engineers/Architects/Managers

Lockwood Greene Engineers, Inc.
1550 W. Peachtree St., NW
Atlanta, Georgia 30367

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Pribble

ATLANTA, GA 300
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23 SEP
1987

USA 22
Calico Scallop

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

A T T A C H M E N T A

Specific Conditions

1. Municipal Waste Combustor Design

   a. Each of the two municipal waste combustors (MWC) shall have a design rated capacity of 250 tons MSW per day, 104 million BTU input per hour and 60,200 pounds steam output per hour with MSW having a heating value of 5,000 BTU per pound.

   b. The maximum individual MWC throughput shall not exceed 288 tons per day, 120 million BTU per hour and 69,000 pounds stream per hour, (3-hour average).

   c. The design furnace mean temperature at the fully mixed zone of the incinerator shall be not less than 1,800°F.

   d. The normal operating range shall be 80% to 115% of design rated capacity.

   e. The MWC shall be fueled with municipal solid waste or wood chips. Other wastes shall not be burned without specific prior written approval of Florida DER.

   f. If auxiliary fuel burners are used, the burners shall be fueled only with distillate fuel oil or natural gas. The annual capacity factor for fuel oil or natural gas shall be less than 10 percent, as determined by 40 CFR §60.43b(d). If the annual capacity factor for fuel oil or natural gas is greater than 10 percent, the facility shall be subject to 40 CFR 60.44b standards for nitrogen oxides.

   g. During start up and shutdown auxiliary fuel (fuel oil, gas, wood) shall be used to achieve and maintain furnace design temperature before and during the firing of municipal solid waste.

2. Air Pollution Control Equipment Design

   a. Each MWC shall be equipped with a particulate emission control device.

   b. Each MWC shall be equipped with an acid gas control device designed to remove at least 90% of acid gases.

   c. The acid gas emission control system shall be designed to be capable of cooling flue gases to an average temperature not exceeding 300°F (3-hour rolling average).

3. Flue gas emissions from each unit shall not exceed the following:

a. Particulate:	0.0150 grains/dscf corrected to 12% CO_2.
b. Sulfur Dioxide:	60 ppmdv corrected to 12% CO_2, 6-hour rolling average;
	or
	70% reduction of uncontrolled SO_2 emissions, 6-hour rolling average. Not to exceed 120 ppmdv corrected to 12% CO_2, 6-hour rolling average.
c. Nitrogen Oxides:	385 ppmdv corrected to 12% CO_2.
d. Carbon Monoxide:	200 ppmdv corrected to 12% CO_2, 4-hour rolling average.
e. Volatile Organic Compounds:	70 ppmdv as carbon corrected to 12% CO_2.
f. Lead:	3.1×10^{-4} gr/dscf corrected to 12% CO_2.
g. Fluoride:	1.54×10^{-3} gr/dscf corrected to 12% CO_2.
h. Beryllium:	2.0×10^{-7} gr/dscf corrected to 12% CO_2.
i. Mercury:	3.4×10^{-4} gr/dscf corrected to 12% CO_2.
j. Visible Emissions:	Opacity of MWC emissions shall not not exceed 15% opacity (6-minute average), except for one 6-minute period per hour of not more than 20% opacity. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to, and the duration of excess emissions are minimized.

For each pollutant for which a continuous emission monitoring system is required in Condition 5., the emission averaging time specified above shall be used to establish operating limits and reportable excess emissions.

Compliance with the permit emission limits shall be determined by EPA reference method tests included in 40 CFR Parts 60 and 61 and listed in Condition 4. of this permit or by equivalent methods approved by Florida DER.

For the purpose of establishing specific increment consumption for TSP and SO_2 at the facility, an hourly emission rate shall be established for each pollutant at the time of performance testing using flue gas flow rates (corrected to 12% CO_2 and prorated to 115% rated furnace capacities) and the applicable concentration limits established above for TSP and SO_2.

The units are subject to 40 CFR Part 60, Subpart E and Subpart Db, New Source Performance Standards (NSPS), except that where requirements with the permit are more restrictive, the requirements in the permits shall apply.

4. Compliance Tests

   a. Initial compliance tests for particulate matter, lead, SO_2, nitrogen oxides, CO, VOC, lead, fluorides, mercury and beryllium shall be conducted in accordance with 40 CFR 60.8 (a), (b), (d), (e) and (f).

   b. Annual compliance test(s) for particulate matter and nitrogen oxides shall be performed. Test(s) may be performed in the common stack.

   c. Compliance with the opacity standard shall be determined in accordance with 40 CFR 60.11(b) and (e).

   d. Compliance with the requirement for 70% control of sulfur dioxide emissions will be determined by using the test methods in Condition 4.e. below or a continuous emission monitoring system for SO_2 emissions before and after the air pollution control equipment which meets the requirements of Performance Specification 2 of 40 CFR 60 Appendix B.

   e. The following test methods and procedures of 40 CFR Parts 60 and 61 or equivalent methods having prior approval of Florida DER shall be used for compliance testing:

      (1) Method 1 for selection of sample site and sample traverses.

(2) Method 2 for determining stack gas flow rate.

(3) Method 3 or 3A for gas analysis for calculation of percent O_2 and CO_2.

(4) Method 4 for determing stack gas moisture content to convert the flow rate from actual standard cubic feet to dry standard cubic feet.

(5) Method 5 or Method 17 for concentration of particulate matter.

(6) Method 9 for visible determination of the opacity of emissions as required in this permit in accordance with 40 CFR 60.11.

(7) Method 6, 6C, or 8 for concentration of SO_2.

(8) Method 7, 7A, 7B, 7C, 7D or 7E for concentration of nitrogen oxides.

(9) Method 10 for determination of CO concentration.

(10) Method 12 for determination of lead concentration.

(11) Method 13B for determination of fluoride concentrations.

(12) Method 25 or 25A for determination of VOC concentration.

(13) Method 101A for determination of mercury emission rate.

(14) Method 104 for determination of beryllium emission rate.

5. Continuous Emission Monitoring

Continuous emission monitors for opacity, oxygen, carbon monoxide, carbon dioxide, and sulfur dioxide shall be installed, calibrated, maintained and operated for each unit.

a. Each continous emission monitoring system (CEMS) shall meet performance specifications of 40 CFR 60, Appendix B. The SO_2 CEMS sample point shall be located downstream of control devices for each unit.

b. CEMS data shall be recorded during periods of startup, shutdown and malfunction but shall be excluded from emission averaging calculations for CO, SO_2 and opacity.

c. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

d. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.

e. Opacity monitoring system data shall be reduced to 6-minute averages, based on 36 or more data points, and gaseous CEMS data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).

f. Averaging CO and SO_2 emission concentrations, corrected for CO_2, shall be computed in accordance with the appropriate averaging time periods included in Condition 3.

g. For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Condition 5. herein, which exceeds the applicable emission limit in Condition 3.

6. Operations Monitoring

a. Devices shall be installed to continously monitor and record steam production, furnace exit gas temperature (FEGT) and flue gas temperature at the exit of the acid gas control equipment. An FEGT to combustion zone correlation shall be established to relate furnace temperature at the temperature monitor location to furnace temperature in the overfire air fully mixed zone.

b. The furnace heat load shall be maintained between 80% and 115% of the design rated capacity during normal operations. The lower limit maybe extended provided compliance with carbon monoxide emissions limit within this permit at the extended turndown rate is achieved.

7. Reporting

a. Fifteen (15) days prior notification of compliance test shall be given to the Florida DER district office.

b. The results of compliance test shall be submitted to the Florida DER office within 45 days after completion of the test.

c. The owner or operator shall submit excess reports for any calendar quarter during which there are excess emissions from the facility. If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period. The report shall include the following:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions (60.7(c)(1)).

(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measure adopted (60.7(c)(2)).

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments (60.7(c)(3)).

(4) When no excess emissions have occured or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report (60.7(c)(4)).

(5) The owner or operator shall maintain a file of all measurements, including continuous monitoring systems performance evaluations; all continous monitoring systems or monitoring device calibration; all continous checks; adjustments and maintenance performed on these systems or devices; and all other information required by this permit recorded in a permanent form suitable for inspection (60.7(d)).

PM
26 Aug 87
Atlanta, GA

file copy

LGM ENGINEERS CONSTRUCTORS

DER
AUG 31 1987
BAQM

85463.02

August 26, 1987

Mr. Barry Andrews
Bureau of Air Quality Management
State of Florida DER
2600 Blair Stone Road
Tallahassee, Florida 32301

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

Dear Mr. Andrews:

Enclosed is the latest draft of permit condition revisions worked out with EPA Region IV for the Lake County Waste-to-Energy Facility. EPA comments are being solicited. We are proceeding with reassessment of project economics taking into account the equipment design, performance and operating requirements included in the draft permit conditions.

Your comments are requested so that we may proceed expeditiously to resolve this issue.

We have not attempted to address the many general conditions, which we would expect to be included by Florida DER.

Note that the emission limits are all in terms of pollutant concentration in the exhaust gas. This is consistent with some Florida permits, while other permits have included mass emission limits. Calculated equivalent pound per hour limits based on certain assumptions were removed from the draft in response to EPA comments. We need to discuss this issue if you find that mass emission limits should be included. We have no problem with the inclusion of mass emission limits, but would want to have input into the calculation of these values.

LGM ENGINEERS CONSTRUCTORS

We are trying to resolve these issues with EPA as expeditiously as practicable and look forward to receiving your comments.

Sincerely,

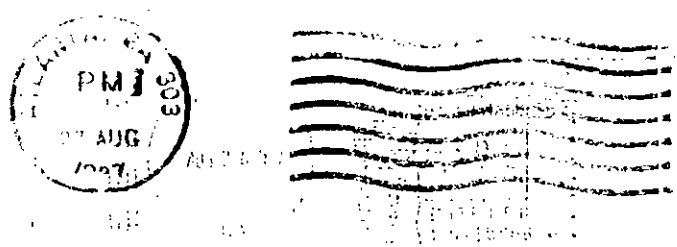
Robert V. Chalfant

Robert V. Chalfant, P.E.
phone: 404/888-1595

RVC/vd

Enclosures

cc: Julia C. Costas w/attachment
L. Oakes
B. Martin
C. Nichols
M. Colvin
G. DeHoff



LGM ENGINEERS CONSTRUCTORS

Mr. Barry Andrews
Bureau of Air Quality Management
State of Florida DER
2600 Blair Stone Road
Tallahassee, Florida 32301

LGM INC / 1330 West Peachtree Street NW / Atlanta Georgia 30367-6501

PERMITTEE
NRG/Recovery Group
Lake County, Florida

Specific Conditions

1. Municipal Waste Combustor Design

   a. Each of the two municipal waste combustors (MWC) shall have a design rated capacity of 250 tons MSW per day, 104 million BTU input per hour and 60,200 pounds steam output per hour with MSW having a heating value cf 5,000 BTU per pound.

   b. The maximum individual MWC throughput shall not exceed 285 tons per day, 115 million BTU per hour and 67,000 pounds stream per hour, (3 hour average).

   c. The design furnace temperature at the fully mixed zone of the incinerator shall be not less than 1,800°F, average.

   d. The normal operating range shall be 80% to 115% of design rated capacity.

   e. The MWC shall be fueled with municipal solid waste or wood chips. Other wastes or fuels shall not be burned without specific prior written approval of Florida DER.

   f. If auxiliary fuel burners are used, the burners shall be fueled only with distillate fuel oil or natural gas. The annual capacity factor for fuel oil or natural gas shall be less than 10 percent, as determined by 40 CFR 60.43b(d). If the annual capacity factor for fuel oil or natural gas is greater than 10 percent, the facility shall be subject to Part 60.44b standards for nitrogen oxides.

2. Air Pollution Control Equipment Design

   a. Each MWC shall be equipped with a particulate emission control device.

   b. Each MWC shall be equipped with an acid gas control device designed to remove at least 90% of acid gases.

   c. The acid gas emission control system shall be designed to be capable of cooling flue gases to an average temperature (3 hour rolling average) not exceeding 300°F.

3. Flue gas emissions from each unit shall not exceed the following:

a.	Particulate:	0.015 grains/dscf corrected to 12% CO_2.
b.	Sulfur Dioxide:	60 ppmdv corrected to 12% CO_2 6-hour, rolling average; or 70% reduction of uncontrolled SO_2 emissions, 6-hour rolling average. Whichever is the higher concentration value.

		The 60 ppmdv limit above shall be modified to a new higher emission limit, not exceeding 120 ppmdv, upon a demonstration by the Permittee that a higher mean emission rate reflects 70% reduction of uncontrolled SO_2 emissions.
c.	Nitrogen Oxides:	385 ppmdv corrected to 12% CO_2.
d.	Carbon Monoxide:	200 ppmdv corrected to 12% CO_2, 4-hour rolling average.
e.	Volatile Organic Compounds:	70 ppmdv as carbon corrected to 12% CO_2.
f.	Lead:	3.1×10^{-4} gr/dscf corrected to 12% CO_2.
g.	Fluoride:	1.54×10^{-3} gr/dscf corrected to 12% CO_2.
h.	Beryllium:	2.0×10^{-7} gr/dscf corrected to 12% CO_2.
i.	Mercury:	3.4×10^{-4} gr/dscf corrected to 12% CO_2.
j.	Visible Emissions:	Opacity of MWC emissions shall not exceed 15% opacity (6-minute average), except for one 6-minute period per hour of not more than 27% opacity. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
k.	Odor:	There shall be no objectionable odor at the site boundary.

For each pollutant for which a continuous emission monitoring system is required in condition 5., the emission averaging time specified above shall be used to establish operating limits and reportable excess emissions.

Compliance with the permit emission limits shall be determined by EPA reference method tests included in 40 CFR Parts 60 and 61 and listed in Condition 4. of this permit or by equivalent methods approved by Florida DER.

4. Compliance Tests

a. Initial compliance tests for particulate matter, lead, SO_2, nitrogen oxides, CO, VOC, lead, fluorides, mercury and beryllium shall be conducted in accordance with 40 CFR 60.8 (a), (b), (d), (e) and (f).

b. Annual compliance test(s) for particulate matter shall be performed. Test(s) may be performed in the common stack.

c. Compliance with the opacity standard shall be determined in accordance with 40 CFR 60.11 (b) and (e).

d. Compliance with the requirement for 70% control of total sulfur dioxide emissions will be determined by using the test methods in condition 4.e. below or an approved continuous emission monitoring system and sampling for SO_2 emissions before and after the air pollution control equipment.

e. The following test methods and procedures of 40 CFR Parts 60 and 61 or equivalent methods having prior approval of Florida DER shall be used for compliance testing:

(1) Method 1 for selection of sample site and sample traverses.

(2) Method 2 for determining stack gas flow rate.

(3) Method 3 or 3A for gas analysis for calculation of percent O_2 and CO_2.

(4) Method 4 for determining stack gas moisture content to convert the flow rate from actual standard cubic feet to dry standard cubic feet.

(5) Method 5 or Method 17 for concentration of particulate matter.

(6) Method 9 for visible determination of the opacity of emissions or the requirements of 40 CER 60.11.

(7) Method 6, 6C or Method 8 for concentration of SO_2.

(8) Method 7, 7A, 7B, 7C, 7D or 7E for concentration of nitrogen oxides.

(9) Method 10 for determination of CO concentration.

(10) Method 12 for determination of lead concentration.

(11) Method 13B for determination of fluoride concentrations.

(12) Method 25A for determination of VOC concentration.

(13) Method 101A for determination of mercury emission rate.

(14) Method 104 for determination of beryllium emission rate.

5. Continuous Emission Monitoring

Continuous emission monitors for opacity, oxygen, carbon monoxide, carbon dioxide, and sulfur dioxide shall be installed, calibrated, maintained and operated for each unit.

a. Each continuous emission monitoring system (CEMS) shall meet performance specifications of 40 CFR 60, Appendix B. The SO_2 CEMS sample point shall be after the acid gas control device for each unit.

b. CEMS data shall be recorded during periods of startup, shutdown and malfunction but shall be excluded from emission averaging calculations for CO, SO_2 and opacity.

c. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

d. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.

e. Opacity monitoring system data shall be reduced to 6-minute averages, based on 36 or more data points, and gaseous CEMS data shall be reduced to 1-hour averages, based on 4 or more data points, in accordance with 40 CFR 60.13(h).

f. Average CO and SO_2 emission concentrations, corrected for CO_2, shall be computed in accordance with the appropriate averaging time periods included in Condition 3.

g. For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Condition 5. herein, which exceeds the applicable emission limit in Condition 3.

6. Operations Monitoring

a. Devices shall be installed to continuously monitor and record steam production, furnace exit gas temperature (FEGT) and flue gas temperature at the exit of the acid gas control equipment. An FEGT to combustion zone correlation shall be established to relate furnace temperature at the temperature monitor location to furnace temperature in the overfire air fully mixed zone.

b. The furnace fuel input shall be maintained between 80% and 115% of the design rated capacity during normal operations. The lower limit may be extended with verification that adequate combustion temperature is maintained.

7. Reporting

a. Fifteen (15) days prior notification of compliance tests shall be given to the Florida DER district office.

b. The results of compliance tests shall be submitted to the Florida DER office within 45 days after completion of the tests.

c. The owner or operator shall submit excess emission reports for any calender quarter during which there are excess emissions from the facility. If there are no excess emissions during the calender quarter, the owner or operator shall submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period. The report shall include the following:

(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions (60.7(c)(1)).

(2) Specific identification of each period of excess emissions. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted (60.7(c)(2)).

(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks, and the nature of the system repairs or adjustments (60.7(c)(3)).

(4) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report (60.7(c)(4)).

(5) The owner or operator shall maintain a file of all measurements, including continuous monitoring systems performance evaluations; all continuous monitoring systems or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and all other information required by this permit recorded in a permanent form suitable for inspection (60.7(d)).

Clare Barry

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

August 14, 1987

Mr. Winston A. Smith, Director
Air, Pesticides, and Toxics
Management Division
U. S. Environmental Protection Agency
345 Courtland Street
Atlanta, Georgia 30365

Dear Mr. Smith:

RE: Lake County Waste To Energy Facility (PSD-FL-113)
(AC 35-115379), Okahumpka, Florida

Thank you for pledging the support of your staff to resolve the Lake County Waste To Energy Facility BACT determination and the corresponding permit modification. I believe that the Lake County Facility is similar in nature to other facilities which will be constructed in the State of Florida, as well as in other states. As is the case, the outcome of this permitting situation will likely play an important part in the future of small scale waste-to-energy facility development.

Prior to the permitting of the Lake County Facility, essentially all of the waste-to-energy facilities being permitted in the State of Florida were proposed as being large (1,000 - 3,000 TPD) and located in major metropolitan areas. Characteristic to these areas were high population densities combined with rapid growth and dwindling landfill space which prompted the proposals to construct waste-to-energy facilities. The need for this technology was so great that the higher tipping fees incurred for switching from landfilling to waste-to-energy was believed by many to be justified. The need for waste-to-energy facilities in these areas was further exemplified when the most recent applicants (Palm Beach and Broward County) agreed to comply with more stringent emission limitations for particulates and sulfur dioxide which necessitated the installation of air pollution control equipment that was not originally proposed, even though the additional equipment will further increase the tipping fee.

Contrary to the situation outlined above, Lake County proposed the construction of a waste-to-energy facility as a better solution to handle municipal waste in the future, although the tipping fee for

the proposed facility would be greater than what was being charged for landfilling and more importantly pushing what was deemed to be publicly acceptable. The criticalness of the resultant tipping fee was clearly evidenced when the preliminary determination was noticed for public comment.

Upon proposing BACT as including dry scrubbing, the bureau received several letters from representatives of the localities that would be affected by the resulting higher tipping fees. In all cases the message was clear that the additional cost of dry scrubbing would raise the tipping fee to the point that would jeopardize the entire project. These comments were viewed to be a sharp contrast to those normally received that outline the need for more stringent controls and requirements for facilities of this size and situation. For your information I have enclosed the comments received when the preliminary determination was noticed as stated above.

In view of the happenings that have occurred with the permitting of the Lake County Facility, I believe that we need to be very careful in making the BACT determination for a facility of this size and situation. The recent EPA memorandum entitled "Operational Guidance of Control Technology for New and Modified Municipal Waste Combustions (MWCs)" which was sent to the regions from the Office of Air Quality Planning and Standards (OAQPS) states on page 5 the following:

> "Accordingly, in considering the range of potential control options during the BACT determination process for MWCs, the reviewing authority must consider a dry scrubber and a fabric filter or electrostatic precipitator as BACT for SO_2 and PM, and combustion controls as BACT for CO. In order to justify a BACT determination calling for a lesser degree of emissions control than can be achieved using these technologies, the permitting authority must demonstrate, based on information contained in the permit file, that significant technical defects, or substantial adverse economic, energy, or environmental impacts or other costs would arise that are specific to the MWC in question."

I believe that this statement strongly supports the direction that has been given to perform the BACT determination on a case-by-case basis. As is the case, we must abstain from the notion that what is appropriate for one particular facility is automatically appropriate for another. The Lake County Facility

is not a Palm Beach or a Broward and thereby should not be treated exactly as such.

It is in our best interest to get out of the landfill business by keeping tipping fees associated with the new waste-to-energy facilities at a level that will support these facilities and at a level that people are willing and able to pay. If it is deemed necessary by EPA that acid gas control is BACT for all new waste-to-energy facilities, let us make sure that other requirements such as particulate limitations, monitoring and compliance testing, which would have the net effect of increasing the tipping fee, be based on a case-by-case determination.

If we can provide you additional assistance on this matter please contact Clair Fancy or me at (904) 488-1344.

Sincerely,

Steve Smallwood, P.E.
Chief
Bureau of Air Quality
Management

SS/BA/ss

cc: Dale Twachtmann
Howard Rhodes
Clair Fancy

Enclosures

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

THE FLORIDA SENATE

Tallahassee, Florida 32301

SENATOR RICHARD H. LANGLEY
REPUBLICAN LEADER
11th District

COMMITTEES:
Appropriations
Commerce
Judiciary-Civil
Rules and Calendar

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 sc 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. LANGLEY
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
BETTY CASTOR

city of eustis, florida

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

June 23, 1986

DER

JUN 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. 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.

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.

MID-FLORIDA At EUSTIS Inc.

P. O. BOX 1351 ---- EUSTIS, FL. 32727-1351
(904) 383-2917

Billy G. Spikes
President

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

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

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

DER
JUN 27 1986
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: 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.

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

LAKE COUNTY
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.

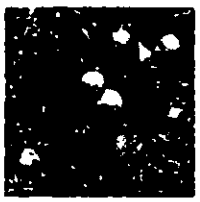
Sincerely,

Jack Pae
Executive Director

JEP/mc

cc Steve Vaughn, President
Richard Huff, President-Elect

CITY
OF
LEESBURG
The Complete City



DER

JUN 27 1986

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

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

Rex Taylor
City Manager

rt:lmd
walter/LDWKII

CITY OF MOUNT DORA

DER

JUN 27 1986

BAQM

William O. Boyd
Mayor

Tony Segreto
City Manager

June 25, 1986

Mr. Bill Thomas
Bureau of Air Quality Management
Department of Enviromental 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

Post Office Box 176 Mount Dora, Florida 32757 Telephone (904) 383-2141

NRG/Recovery Group, Inc.

June 25, 1986

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

Cordially yours

Walt Walters
President

1616 Athens St. Lakeland, Florida 33803 813/687-4593

8/12/87
Atlanta, GA

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

AUG 12 1987

DER

AUG 14 1987

BAQM

4APT-APB/eaw

Mr. Clair Fancy, Deputy Chief
Bureau of Air Quality Management
Florida Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Dear Mr. Fancy:

This is to confirm an August 5, 1987, telephone conversation between you and Mr. Wayne J. Aronson of my staff regarding his upcoming inspections of resource recovery facilities in the Tampa and Miami, Florida areas. The following schedule and list of facilities to be visited have been discussed with the appropriate local agency contacts:

August 24, 1987 - Pinellas County Resource Recovery Facility (RRF)
- McKay Bay RRF
- Hillsborough County RRF

August 25, 1987 - City of Lakeland McIntosh 43
- Dade County RRF

August 26, 1987 - Palm Beach County RRF

If you have any questions regarding these upcoming inspections, please feel free to contact me or Wayne J. Aronson at (404) 347-2864.

Sincerely yours,

Bruce P. Miller

Bruce P. Miller, Chief
Air Programs Branch
Air, Pesticides, and Toxics
Management Division

cc: Mr. Iwan Choronenko
Hillsborough County Environmental
Protection Commission

Mr. Patrick Wong
Dade County Environmental
Planning Division

Mr. Peter Hessling
Pinellas County Department of
Environmental Management

Mr. E. J. Sacco
Palm Beach County Health Department

Copied: CHF/BT
Barry Andrews } 8/17/87

4/89 2 555

PL

Patty - file
"City of Lakeland"
burning COKE

KOCH

KOCH CARBON INC

RECEIVED

DEC 13 1993

Division of Air
Resources Management

December 9, 1993

Mr. John C. Brown P.E.
Administrator, Permitting and Standards Section
Bureau of Air Regulations
Florida Department of Environmental Regulations
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399 -2400

Dear Mr. Brown,

I want to thank you and Mr. Lewis for taking the time to meet with Shawn McGreevy and me on the 8th. The information you provided was beneficial.

I hope you were also able to gain a better understanding the role we are playing in providing a low cost alternative fuel to the Florida Utilities.

Regards,

Mark Jones

cc: Shawn McGreevy
Mark Wolff

P.O. Box 2219 • Wichita, Kansas 67201-2219 • 316/832-6661 • FAX 316/832-5752
TLX 1561769

Full Copy

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

Interoffice Memorandum

DER

JUL 21 1987

BAQM

FOR ROUTING TO OTHER THAN THE ADDRESSEE
To: Barry Andrews Location: BAQM
To: Location:
To: Location:
From: Date:

TO: Dale Twachtmann, Secretary

THROUGH: Dan Thompson, General Counsel

FROM: Julie Costas, Assistant General Counsel JLCostas

DATE: July 17, 1987

RE: Update on Lake County Waste-to-Energy Facility

On this date, a meeting was held between DER and Lake County representatives to discuss the mechanics of amending NRG's permit to satisfy EPA's concerns. (see attached attendance list)

Discussion was primarily limited to the length of time it would take DER to process an amended permit once the changes were negotiated and agreed to between NRG and EPA.

It was estimated that it would take between one and two weeks for BAQM to rewrite the Preliminary Determination and provide it to NRG, who would then provide for publication of notice which begins a 30-day comment period. Once the comment period closes, it would be a matter of days for the Final Determination to be prepared and signed by the Secretary.

NRG counsel and representatives will be meeting further with EPA next week, and reassessing technical data and their financial position. They expect to be back in touch with DER the first week in August with an indication of how they want to proceed.

Obviously, if this matter is resolved as outlined above, the Administrative Appeal and whether or not DER intervenes become moot issues. Therefore, any future meetings to discuss the Department's role in this matter will be scheduled if needed.

JCC/kc

Attachment

cc: John Shearer
Howard Rhodes
Steve Smallwood
Mimi Drew

Lake County Resource Recovery Facility

July 17, 1987 11:00 a.m.

Barry Andrews	BAGM	(904) 488-1344
Julie Costas	DER-OGC	904/488-9730
Willard Hanks	BAQM	(904) 488-1344
Steve Smallwood	BAQM	(904) 488-1344
MIKE COLVIN	LGM	404-873-4867
LES OAKES	KING & SPALDING	404-572-3314
Bob Chalfant	LGM Engineers Constructors	(404) 888-1595

Lake County Solid Waste Energy Recovery Facility PSD-FL 113

File Copy

KING & SPALDING
2500 TRUST COMPANY TOWER
ATLANTA, GEORGIA 30303
404/572-4600

TELEX: 54-2917 KINGSPALD ATL
TELECOPIER: 404 659-4838
524-7429
CABLE: TERMINUS

1730 PENNSYLVANIA AVENUE, N.W.
SUITE 1200
WASHINGTON, D. C. 20006
202/737-0500
TELECOPIER: 202 737-5714

JUL 8 1987

Dept. of Environmental Reg.
Office of General Counsel

July 6, 1987

Ms. Julia Costas
Assistant General Counsel
Office of General Counsel
Department of Environmental
Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399

Dear Julia:

Enclosed are the January 30, 1987 BACT determination performed by EPA and a copy of the October 23, 1986 letter from Bruce Miller to C. H. Fancy. I have also enclosed a copy of a new guidance memorandum that EPA shared with us during our meeting on July 1, 1987. If you have questions, please feel free to call me.

Sincerely,

Les Oakes

LO/smj
Enclosures
cc: Mr. Walt Walters
Mr. Mike Colvin
Mr. Bob Chalfant
Mr. Horace H. Sibley
Mr. Charles H. Tisdale, Jr.

DER
JUL 8 1987
BAQM

Ann Gumbell

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Air Quality Planning and Standards
Research Triangle Park, North Carolina 27711

26 JUN 1987

MEMORANDUM

SUBJECT: Operational Guidance on Control Technology for New and Modified Municipal Waste Combustors (MWCs)

FROM: Gerald A. Emison, Director
Office of Air Quality Planning and Standards (MD-10)

TO: Air Management Division Directors
Regions I, III, V and IX

Air and Waste Management Division Director
Region II

Air, Pesticides, and Toxics Management Division Directors
Regions IV and VI

Air and Toxics Division Directors
Regions VII, VIII and X

As you know, numerous questions regarding the selection of appropriate pollution control requirements for MWCs have arisen during recent years in major source permitting proceedings under the prevention of significant deterioration (PSD) provisions of Part C of the Clean Air Act and the nonattainment new source review (NSR) provisions of Part D of the Act. Accordingly, the attached operational guidance is being issued to promote consistency in making best available control technology (BACT) determinations under PSD and lowest achievable emission rate (LAER) determinations under nonattainment NSR, and to reduce delay and confusion in the permitting process. This guidance requires reviewing authorities, in considering the range of potential control options during the BACT determination process for MWCs, to consider a dry scrubber and a fabric filter or electrostatic precipitator as BACT for sulfur dioxide (SO_2) and particulate matter (PM), and combustion controls as BACT for carbon monoxide (CO).

The Administrator remanded to Region IX on June 22, 1987, their previous concurrence on a PSD permit for the H-Power MWC to be constructed in Honolulu, Hawaii. Petitioners had argued that, (a) BACT for this facility did not adequately justify the failure to require the use of an acid gas scrubber, and (b) the permitting authority did not evaluate the effectiveness of acid gas scrubbers in reducing emissions of unregulated pollutants, as required

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by the June 1986 North County Resource Recovery Associates PSD Appeal decision (or North County remand). In remanding the H-Power permit application to Region IX for further proceedings, the Administrator made it clear that the Agency considers acid gas scrubbers to be an available technology for excess air MWCs that fire refuse-derived fuel (RDF) such as the H-power facility. The attached operational guidance states that this type of post-combustion control is one component of available technology for modular, starved air MWCs and massburn, excess air MWCs, in addition to RDF-fired, excess air MWCs.

As stated above, the operational guidance includes a second component of available technology, which is combustion control for the criteria pollutant CO. Since the effectiveness of the two components of available technology in controlling unregulated pollutants is an important consideration in individual BACT determinations (per the North County remand), the attached guidance states that (a) acid gas scrubbers followed by fabric filters or electrostatic precipitators are effective in controlling potentially toxic organic and metal pollutants, as well as acid gases other than sulfur dioxide, and (b) combustion controls are effective in controlling potentially toxic organic pollutants.

The technical basis for the operational guidance is documented in five reports which are a part of the Agency's comprehensive study of MWC. These volumes are listed in the References section of the guidance. You will note that the guidance indicates "specified values" should be selected on a site specific basis for several design and operating parameters of the facility and for emissions of criteria pollutants. A thorough discussion of the factors to be considered in choosing the "selected values" is included in the five reports from the comprehensive MWC study.

As noted under Section V, this guidance should be transmitted to all State and local agencies to which PSD permitting authority has been delegated under 40 CFR Section 52.21(u). The transmittal letter should specify that the delegation agreement is amended to include this guidance. States which have received SIP approval of a PSD program under 40 CFR Section 51.166 (formerly Section 51.24) should also be informed of this guidance and of EPA's expectation that it be followed.

Attachment

cc: James DeMocker (ANR-443)
Gregory Foote (LE-132A)
Steve Greene (WH-565)
Joseph E. Lees (ANR-443)
J. Craig Potter (ANR-443)
John C. Ulfelder (A-101)
Marcia Williams (WH-562)

3 of 14

3

6/26/87

OPERATIONAL GUIDANCE ON CONTROL TECHNOLOGY FOR NEW AND MODIFIED MUNICIPAL WASTE COMBUSTORS

I. The Need for Guidance.

The combustion of municipal waste represents an increasingly important element of the solid waste disposal problem in the U.S. However, the operation of municipal waste combustors (MWCs) releases potentially harmful pollutants to the air. Human exposure can occur directly or indirectly, and there is also concern that the environment could be vulnerable to long-term accumulation of emitted pollutants. EPA is addressing these issues in a comprehensive, integrated Municipal Waste Combustion Study and with this operational guidance.

Numerous questions regarding the selection of appropriate pollution control requirements have arisen during recent years in major source permitting proceedings under the prevention of significant deterioration (PSD) provisions of Part C of the Act and the nonattainment new source review (NSR) provisions of Part D of the Act. Uncertainty over these questions has led to conflict over minimum legal requirements and consequent delay in the permitting and construction of MWCs. Hence, there is a need for guidance to resolve controversies which may arise as to facilities seeking permits. Accordingly, EPA is issuing this operational guidance for use in making best available control technology (BACT) determinations under PSD and lowest achievable emission rate (LAER) determinations under nonattainment NSR. EPA believes that this guidance will promote consistency in control requirements, and reduce delay and confusion in the permitting

process. At the same time it will allow permitting authorities to give appropriate consideration to local factors in making case-by-case BACT determinations as required under law.

II. Administrative History.

Section 169(3) of the Act provides that BACT determinations in PSD permits must be "based on the maximum degree of reduction of each pollutant subject to regulation under this [Act] . . . which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable." EPA's regulations track this language. See 40 C.F.R. 52.21(b)(12), 40 C.F.R. 51.166(b)(12). In addition, in two administrative appeals involving resource recovery facilities, EPA has further refined the analysis which permitting authorities must conduct in making BACT determinations.

In North County Resource Recovery Associates, PSD Appeal No. 85-2 (June 3, 1986), the Administrator issued a Remand Order which held that, in making BACT determinations for a regulated air pollutant, the permitting authority must consider the effect of that decision on emissions of pollutants not regulated under the Clean Air Act. North County provided that the final BACT decision should address these environmental impacts, and that the permitting authority may ultimately choose more stringent emissions limitations for the regulated pollutant than it would otherwise have chosen if it would have the collateral benefit of restricting emissions of the unregulated pollutant. In the North County case, the permitting authority had required the use of a dry scrubber and fabric filter as BACT for sulfur dioxide, but had failed to consider the effect of that decision on emissions

of certain unregulated pollutants -- dioxins and furans, heavy metals, and acid gases -- on the grounds that it lacked authority to do so. Various persons petitioned the Administrator under 40 C.F.R. Part 124. In response to the Administrator's subsequent remand order, the permitting authority analyzed the effect of various control options on these three classes of pollutants, and found that no other controls on regulated pollutants would be more effective in reducing emissions of the unregulated pollutants. The Administrator then ruled that the permitting authority had satisfied the requirements of the remand order, and denied the petitions. See North County Resource Recovery Associates, PSD Appeal No. 85-2, Order Denying Review (September 4, 1986).

The Administrator ruled in Honolulu Resource Recovery Facility ("H-Power"), PSD Appeal No. 86-6, Remand Order (June 22, 1987), that a PSD permitting authority has the burden of demonstrating that adverse economic impacts justify the failure to require as BACT the most effective control technology which is available. He also found that acid gas scrubbers are an available control technology for sulfur dioxide (SO_2). The H-Power decision also provided that the economic impacts must be specific to the source in question and substantial. Thus, because the Administrator agreed with EPA Region IX that Hawaii had not adequately demonstrated the basis for its conclusion that economic factors justified the absence of flue gas treatment as BACT for SO_2, he remanded the matter for further proceedings.

6 of 14 --

EPA today also draws upon the technical data referenced below, and its experience in issuing, reviewing, and enforcing PSD permits for MWCs. Recent emission test data have demonstrated that particulate matter (PM), SO_2, and other air pollutants (including organics, heavy metals, and acid gases) can be controlled effectively by acid gas scrubbing devices (dry scrubbers) equipped with efficient particulate collectors. Over 20 MWC facilities in Europe are known to be operating with dry scrubbers and particulate collectors, and at least 37 such facilities are known to exist in Japan. In the United States, three facilities currently are in operation and at least 15 have been permitted to construct with dry scrubbing and particulate control devices as the specified technology. Thirteen of these facilities are expected to be operating by December 1988.

Based on this information, it is clear that a dry scrubber followed by either a fabric filter or electrostatic precipitator are "available" technologies for effective control of the SO_2 and PM emitted by MWCs, and that these technologies also are effective in controlling emissions of potentially toxic organic and heavy metal pollutants, and acid gases other than SO_2. In addition, the data show that these technologies are reliable and reasonably affordable. Similarly, combustion controls are an available technology for the control of carbon monoxide (CO) emitted by MWCs, and are effective in controlling that criteria pollutant and potentially toxic organic pollutants. EPA's information indicates that this technology also is reliable and reasonably affordable.

III. BACT Guidance for SO_2, PM, and CO.

Accordingly, in considering the range of potential control options during the BACT determination process for MWCs, the reviewing authority must consider a dry scrubber and a fabric filter or electrostatic precipitator as BACT for SO_2 and PM, and combustion controls as BACT for CO. In order to justify a BACT determination calling for a lesser degree of emissions control than can be achieved using these technologies, the permitting authority must demonstrate, based on information contained in the permit file, that significant technical defects, or substantial adverse economic, energy, or environmental impacts or other costs would arise that are specific to the MWC in question. Permitting authorities remain free to make case-by-case judgments in accordance with today's guidance. However, based on the above-referenced information regarding legal requirements and the availability, effectiveness, and cost of these technologies, EPA expects that proper application of this guidance will result in few, if any, BACT determinations entailing application of pollution control technologies less effective than those called for herein.

Today's guidance is general; it is limited to describing types of post-combustion control equipment and to establishing general criteria for combustor design, combustor operating practices, emission monitoring, and operator training. It does not set specific emission limits. Detailed information regarding the maximum degree of emissions control achievable with these technologies is available in the referenced technical documents, the BACT/LAER Clearinghouse, or from EPA. Such information should be used by applicants and permitting authorities setting specific emissions

8

limits for PSD permits. In addition, today's guidance only addresses control technologies currently in widespread use for MWCs, and establishes minimum criteria for BACT determinations. Permitting authorities are not relieved of their responsibility to consider, on a case-by-case basis, whatever available technologies may be anticipated to provide a greater degree of control than those addressed today. Similarly, because control technologies and the other factors in forming BACT determinations are constantly evolving, the technology providing the greatest degree of emissions control taking economic, energy, and environmental impacts into account may likewise change over time. As one example, flue gas treatment technology for the criteria pollutant nitrogen oxides (NO_x) is in operation at one MWC in the U.S., and this technology should be considered by permitting authorities in making BACT determinations. In addition, emerging technologies in flue gas cleaning may develop which can attain the level of multipollutant control currently demonstrated by dry scrubbing/particulate matter controls, and technologies such as these should be considered in future BACT determinations. Permitting authorities and applicants must keep abreast of new developments. Of course, EPA will assist in this endeavor.

IV. LAER Guidance for Nonattainment Areas.

The technologies discussed herein for control of SO_2 PM, CO, and NO_x have all been successfully implemented, and thus have been "achieved in practice" by MWCs within the meaning of section 171(3) of the Act. Hence, in nonattainment areas where NSR requirements apply and major new sources and modifications must apply LAER, no less effective pollution control technologies may be imposed as LAER.

V. Implementation.

Today's guidance applies to all ongoing PSD and NSR proceedings, as well as to all new permit applications. In consideration of the needs for program stability and equity to sources which have in good faith relied on pre-existing permitting guidelines, this guidance does not apply to PSD and NSR permit proceedings for which, as of June 26, 1987, final permits have already been issued and, with respect to PSD permits issued by EPA, agency review procedures under 40 C.F.R. Part 124 have been exhausted.

This operational guidance applies to PSD permits issued by EPA directly through its Regional offices and indirectly through State and local agencies pursuant to delegation agreements made under 40 C.F.R. 52.21(u). Such agencies will be notified by letter of this guidance. It will constitute an amendment to the pre-existing delegation agreements. EPA Regional offices will review all draft permits for MWCs issued by delegate agencies during the public comment period to insure proper application. Further program evaluation will take place under the National Air Audit System (NAAS). If delegate agencies should fail to adhere to this guidance, EPA staff may initiate administrative appeal proceedings under 40 C.F.R. Part 124 in appropriate cases. Such action would be appropriate where, for example, failure to follow the guidance results in a finding of fact or conclusion of law which is clearly erroneous, or involves an exercise of discretion or an important policy consideration which the Administrator should review. See 40 C.F.R. 124.19(a). Action would also be appropriate where failure to follow the guidance resulted in an inability to determine,

based on the record, whether a clear error occurred. If necessary, EPA may also revoke the delegation of PSD authority to the State or local agency.

With respect to State PSD permits issued pursuant to a State implementation plan (SIP) program approved by EPA under 40 C.F.R. 51.166 (formerly 51.24), and State NSR programs approved under Part D of the Act and 40 C.F.R. 51.165 (formerly 51.18(j)), EPA expects States to follow today's guidance in generally the same fashion as delegate agencies. EPA will use the guidance as a reference point in its oversight of State MWC permit actions. As with delegated permits EPA will participate in permit proceedings and conduct NAAS evaluations. If agencies processing NSR permits or PSD permits under approved State programs should fail to adhere to this guidance, EPA may initiate administrative and/or judicial action under sections 113 and/or 167 of the Act in appropriate cases. Such action would be appropriate where, for example, failure to follow the guidance results in a finding of fact or conclusion of law which is clearly erroneous, or in an inability to determine whether a clear error occurred. If necessary, EPA may also call for SIP revisions under section 110(a)(2)(H).

Insofar as today's guidance addresses minimum legal requirements for BACT determinations, it simply implements existing regulations and policy, including Agency actions already made by the Administrator in the North County and H-Power cases. To the extent the guidance addresses the technical issues of availability, effectiveness, and cost of control technologies for MWCs, it expresses EPA's view regarding the proper usage, in permit proceedings under existing EPA regulations and SIP programs, of the factual data contained

in the five documents referenced below. Those documents present information on the alternative controls available for MWCs, the performance capabilities and costs of those controls, and the methods for monitoring and measuring emissions from MWCs. Factors to be considered in choosing the "specified values" to be included in permits, as noted in the guidance, such as maximum concentration of CO in emissions and minimum value of furnace temperature, are contained in these references. Thus, the guidance does not constitute rulemaking within the meaning of section 307(d) of the Act or under the Administrative Procedure Act. Accordingly, it is not necessary to implement this guidance, as to EPA permits issued by Regional offices or State and local agencies, through changes in the PSD regulations at 40 C.F.R. 52.21. Likewise, regarding approved State PSD programs, it is not necessary to revise 40 C.F.R. 51.166 and require corresponding SIP revisions.

VI. Technical Guidance.

Today's operational guidance applies to three types of MWCs: massburn, excess air MWCs; excess air MWCs that fire refuse-derived fuel; and modular, starved air MWCs. It applies to those MWCs that operate with energy recovery and those that operate without energy recovery. It applies to both major new and major modified facilities of these types. The guidance requires that values for emission limits and operating parameters be specified in MWC permitting decisions.

One component of control technology for MWCs is the application of the appropriate post-combustion control equipment. The EPA has identified this equipment as a dry scrubber with fabric filter or with electrostatic

precipitator. The concentration of particulate emissions in the exhaust gases from the post-combustion control equipment shall not exceed a specified maximum value; and the SO_2 emissions in the exhaust gases shall not exceed a specified maximum concentration value or the percent reduction in SO_2 emissions across the post-combustion control equipment shall not be less than a specified value. Performance of the dry scrubber and fabric filter or electrostatic precipitator in controlling acid gases, potentially toxic metals, and potentially toxic organic pollutants is affected sigificantly by the reduction in flue gas temperature which occurs in the dry scrubber. The control system shall be designed and operated such that the flue gas temperature at the outlet from the dry scrubber does not exceed a specified value.

A second component of control technology for MWCs is proper design and operation of the combustion system, which controls CO and potentially toxic organic pollutants. Minimum concentrations of CO in emissions from MWCs are associated with the implementation of several good combustion practices. These practices are also related to the effective destruction of potential emissions of toxic organic pollutants, including dioxins and furans. Concentrations of CO in furnace exhaust gases shall not exceed a specified maximum value, and CO and O_2 concentrations in the exhaust gases shall be monitored continuously. In addition, furnace operating temperatures shall be no lower than a specified minimum value, and a procedure for continuous monitoring shall be established to ensure that the specified temperature is maintained.

The capabilities to control flow rates and distributions of underfire (primary) and overfire (secondary) air, to monitor continuously CO concentration and furnace temperature, to maintain thermal load within a specified range, and to control the process to maintain CO and temperature of the furnace at appropriate levels are all important to good combustion. Detailed information regarding the numerical values to be assigned to the emission levels and equipment design and operating parameters associated with good combustion are provided in the documents cited under References.

References:

Municipal Waste Combustion Study: Emission Data Base for Municipal Waste Combustors. EPA/530-SW-87-021B

Municipal Waste Combustion Study: Combustion Control of Organic Emissions. EPA/530-SW-87-021C

Municipal Waste Combustion Study: Flue Gas Cleaning Technology. EPA/530-SW-87-021D

Municipal Waste Combustion Study: Cost of Flue Gas Cleaning Technologies. EPA/530-SW-87-021E

Municipal Waste Combustion Study: Sampling and Analysis. EPA/530-SW-87-021F

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

MEMORANDUM

DATE: JAN 30 1987

SUBJECT: Lake County Waste to Energy Facility (PSD-FL-113), Okahumpka, Florida

FROM: Wayne J. Aronson, Chief
Program Support Section

THRU: Bruce P. Miller, Chief
Air Programs Branch

TO: James T. Wilburn, Chief
Air Compliance Branch

SUMMARY:

On September 25, 1986, the Florida Department of Environmental Regulation (DER) issued a PSD final determination and construction permit to the Lake County Waste to Energy facility located in Okahumpka, Florida. The PSD permit authorizes Lake County to build two 250 TPD mass burn incinerators which will be fueled with a combination of municipal solid waste (MSW) and wood chips.

The permit requires Lake County to meet a 0.02 gr/dscf (corrected to 12% CO_2) particulate emissions limit and a 58.4 lb./hr. (30 day rolling average not to exceed 29.2 lb./hr.) sulfur dioxide emissions limit. Based on the typical ultimate analysis of the waste, this SO_2 emission limit represents a 30% SO_2 retention in the ash. An electrostatic precipitator will be installed to control particulate emissions, however, no acid gas controls are being required for this facility. I might note that the state permit does require Lake County to leave sufficient space to install acid gas controls if required in the future.

Based upon our BACT analyses for particulate and sulfur dioxide emissions (see attachment) in accordance with the interpretation of the North County, California, remand, the PSD permit issued to Lake County does not represent BACT for particulate and SO_2 emissions.

We believe that a 0.015 gr/dscf (corrected to 12% CO_2) is BACT for particulate matter and 70% removal (17.5 lb./hr. maximum emission limit) is BACT for sulfur dioxide emissions. These emission limits can be achieved through the use of high efficiency particulate and acid gas controls. The facility should not be allowed to construct without employing these controls which are capable of meeting BACT.

Action:

Background:

On May 20, 1986, the Florida DER issued a PSD preliminary determination for this proposed source and stipulated requirements for acid gas control as BACT. However, the preliminary determination did not adequately address BACT for SO_2 although a scrubber was required.

By letter dated July 2, 1986 (attached), EPA notified the Florida DER that the BACT determination for SO_2 should consider the effect that SO_2 controls would have on unregulated pollutants, such as HCl and dioxin.

On August 15, 1986, the Florida DER issued a second PSD preliminary determination for the Lake County facility without requiring acid gas control.

By letter dated September 19, 1986 (attached) we notified the Florida DER that we did not concur with the applicant's conjecture that municipal solid waste incineration with acid gas control is not economically feasible.

On September 24, 1986, the Florida DER issued a final determination and permit to Lake County and did not require acid gas control.

By letter dated October 23, 1986 (attached), this office notified the Florida DER that we did not concur with their final determination and recommended that the final determination and permit be reissued employing acid gas control and a 0.015 gr/dscf particulate limit. To date the Florida DER has not responded to our recommendation and has not reissued the final determination and PSD permit.

LAKE COUNTY - BACT ANALYSES FOR PARTICULATE AND SO_2

The Florida DER PSD permit requires the applicant to meet a 0.02 gr/dscf (corrected to 12% CO_2) particulate emission limit. Based on the following a 0.015 gr/dscf (corrected to 12% CO_2) particulate emission limit should be considered BACT.

For an additional $55,300 (annualized operating and cost) per year, an additional 10.3 tons per year of particulate matter, including 0.25 tons per year of lead, would also be removed. At 0.015 gr/dscf, a total of 2757 tons per year of particulate matter is removed at a cost of $425 per ton of particulate matter removed or $6.42 per ton of municipal waste incinerated. This cost consideration is reasonable.

Furthermore, the Florida DER PSD permit requires the applicant to meet a 58.4 lb./hr. (30 day rolling average-not to exceed 29.2 lb./hr.) sulfur dioxide emission limit. Based on the following we have determined that acid gas control with a 70% removal (max. 17.5 lbs./hr.) of SO_2 is BACT. With this percentage of removal, and in accordance with the Administrator's remand of the North County, California, PSD permit, hazardous yet unregulated pollutants (i.e., dioxins, dibenzofurans, condensible metals, HCl, and others) would be removed.

Taking into consideration the cost of the installation of acid gas control and the amount of air pollutants removed enhances EPA's argument that additional acid gas controls are warranted. For an additional $1,400,000 (annualized operating and capital cost) per year, 452(1) tons per year of HCl, 256(2) tons per year of SO_2, 10.8(3) tons per year of Fl and 1.15(4) tons per year of H_2SO_4 (mist) would be removed. This equates to 720 tons per year of acid and sulfur dioxide removed at a cost of $1944 per ton of acid gases removed or an additional cost of $7.67 per ton of municipal waste incinerated. This cost consideration is reasonable considering dioxin and furan emissions would also be reduced by 90+%, if proper incinerator combustion controls are employed and proper flue gas temperatures are maintained.

---

(1) HCl = 5.5 lbs./ton (4.5% plastics)
(2) SO_2 = 4 lbs./ton
(3) Fl = .13 lbs./ton
(4) H_2SO_4 = .014 lbs./ton

4APT-AP/lms

OCT 23 1986

Mr. C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

RE: Lake County Solid Waste Energy Recovery Facility - PSD-FL-113

Dear Mr. Fancy:

This is to acknowledge receipt of your September 25, 1986, PSD final determination for the above referenced facility to be located in Okahumpka, Florida. By letter dated September 19, 1986, we submitted our comments to you regarding Region IV EPA's position on pollution control requirements for municipal solid waste incinerators.

We feel that a BACT determination for acid gas control and a stringent particulate emissions limit of 0.015 gr/dscf is in agreement with "State of the Art" controls now being employed at similar facilites throughout the county and the PSD remand for the North County Resource Recovery facility in California. The remand states that more stringent BACT requirements for regulated pollutants may be imposed where the simultaneous control of hazardous yet unregulated pollutants is achieved. Without the economic analysis for the plant design (fluidized bed combustion) requested in our letter of September 19, 1986, we cannot concur with your final determination, and recommend that the final determination and permits be reissued employing acid gas controls.

If you have any questions or comments, you may contact Mr. Wayne Aronson, Chief, Program Support Section at (404) 347-2864.

Sincerely yours,

Bruce P. Miller, Chief
Air Programs Branch
Air, Pesticides, and Toxics
Management Division

BRANDON/lms 10/20/86 DOC #22 DISC #1 PSS

BRANDON MMB 10/22

ARONSON

MILLER BPM 10/22/86

PM
89 Fmn
Atlanta, Ga.

File Copy

4APT-AP/lmg

OCT 23 EPD

DER
JUL 2 1987
BAQM

Mr. C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management
Florida Department of
Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

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Sincerely yours,

Bruce P. Miller, Chief
Air Programs Branch
Air, Pesticides, and Toxics
Management Division

Date

ROUTING AND TRANSMITTAL SLIP

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1. Barry Andrews		
2.		
3.		
4.		
5.		

Action	File	Note and Return
Approval	For Clearance	Per Conversation
As Requested	For Correction	Prepare Reply
Circulate	For Your Information	See Me
Comment	Investigate	Signature
Coordination	Justify	

REMARKS

Per your request.

DO NOT use this form as a RECORD of approvals, concurrences, disposals, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post)	Room No.—Bldg.
Wayne Aronson	Phone No.

5041-102

OPTIONAL FORM 41 (Rev. 7-76)
Prescribed by GSA
FPMR (41 CFR) 101-11.206

PM
30 Sun
Atlanta, Ga.

AC 35-115379
PSD-FL-113

File (Copy)

KING & SPALDING

2500 TRUST COMPANY TOWER
ATLANTA, GEORGIA 30303
404/572-4600

TELEX: 54-2917 KINGSPALD ATL
TELECOPIER: 404 659-4838
524-7429
CABLE: TERMINUS

1730 PENNSYLVANIA AVENUE, N. W.
SUITE 1200
WASHINGTON, D. C. 20006
202/737-0500
TELECOPIER: 202 737-5714

DER
JUL 2 1987
BAQM

June 30, 1987

Mr. Walt Walters, President
NRG/Recovery Group, Inc.
1616 Athens Street
Lakeland, Florida 33802

Dear Walt:

As we discussed by telephone on June 26, 1987, a notice of appeal and request for hearing of the administrative order issued by the United States Environmental Protection Agency was filed on that date. I have enclosed a copy of the notice of appeal for your files.

Sincerely,

Les Oakes

LO:rb

Enclosure

cc: J. Michael Colvin
Robert Chalfant
Dale Twatchmann
Julie Costas
Steve Smallwood
Clair Fancy
Horace H. Sibley
Charles H. Tisdale, Jr.

Copied: Pradeep Raval
Barry Andrews
CHF/BT
7/6/87

File 1e 17

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

In the matter of:	)
LAKE COUNTY WASTE TO ENERGY FACILITY,	)
OKAHUMPKA, FLORIDA PROCEEDINGS UNDER SECTION 167 OF THE CLEAN AIR ACT, AS AMENDED, 42 U.S.C. § 7477	)

NOTICE OF APPEAL AND REQUEST FOR HEARING

NRG/Recovery Group, Inc. hereby appeals the administrative order issued by the Regional Administrator of Region IV of the United States Environmental Protection Agency on June 3, 1987, and requests a hearing before the agency's administrative law judge to vacate the order.

Statement of Facts

1.

NRG/Recovery Group, Inc. (NRG) is a Florida Corporation which proposes to construct and operate two 250 ton-per-day waste-to-energy incinerators in Okahumpka, Lake County, Florida.

2.

On March 11, 1986, NRG submitted an application for a Prevention of Significant Deterioration (PSD) permit to the Florida Department of Environmental Regulation (FDER). FDER

determined that the NRG application was complete on March 18, 1986.

3.

On May 20, 1986, FDER issued a preliminary determination of its review of the application submitted by NRG, a draft permit for the NRG facility and a notice of intent to issue NRG a PSD permit.

4.

On August 15, 1986, FDER issued a second preliminary determination, draft PSD permit, and notice of intent to issue. The second preliminary determination, draft permit, and notice of intent to issue were issued in response to comments received pursuant to the May 20 preliminary determination.

5.

On September 25, 1986, FDER issued a final PSD permit to NRG. This permit became final 30 days after its issuance.

6.

In 1977, Congress amended the Clean Air Act (CAA), 42 U.S.C. § 7401, et seq., to prevent significant deterioration of air quality. 42 U.S.C. § 7470(4). In accordance with Section 7471 of the CAA, Florida amended its implementation plan to provide regulations to prevent significant deterioration of air quality. See Fla. Admin. Code § 17-2.500, et seq.

7.

On November 22, 1983, the United States Environmental Protection Agency (EPA) approved the portion of Florida's

implementation plan which addresses the prevention of significant deterioration. 48 F.R. 52713. Under this approval, Florida received the authority to issue PSD permits in lieu of EPA.

8.

At all times relevant to this appeal, the portions of Florida's implementation plan applicable to the NRG PSD permit have remained in full force and enforceable by FDER.

9.

The authority to issue a PSD permit to NRG has at all times since March 11, 1986, resided with FDER.
See 48 F.R. 52713, 15.

10.

NRG has a valid PSD permit, which satisfies the requirements of Section 7475 of the CAA, 42 U.S.C. § 7475, issued by FDER.

11.

On June 3, 1987, Jack E. Ravan, Regional Administrator, EPA, Region IV, issued an administrative order to NRG under Section 7477 of the CAA, 42 U.S.C. § 7477, prohibiting on-site construction by NRG of its PSD permitted facility.

12.

EPA lacked the authority to issue the June 3, 1987 administrative order because the agency has delegated the authority to issue a PSD permit to NRG to FDER, and EPA has not revoked that delegation of authority.

13.

The administrative order has illegally deprived NRG of the ability to construct and operate its waste-to-energy incinerators. This is an unlawful agency action which deprives NRG of valuable rights without due process of law as provided by the Constitution of the United States. U.S. Const. amend. V.

Jurisdiction

14.

EPA is an "agency" as defined by Section 551 of the Administrative Procedures Act, (APA), 5 U.S.C. § 551(1).

15.

The administrative order issued by EPA on June 3, 1987, is an "order" as that term is defined in Section 551 of the APA, 5 U.S.C. § 551(6).

16.

The administrative order issued by EPA is a "sanction" as that term is defined by the APA because it destroys, takes, seizes, and withholds from NRG the valid PSD permit which FDER issued and because it purports to be a revocation or suspension of the FDER permit. 5 U.S.C. § 551(10)(D), (F).

17.

NRG is a "party" as that term is defined by Section 551 of the APA because its interests have been adversely affected by EPA's administrative order. 5 U.S.C. § 551(3).

18.

Section 554 of the APA provides that NRG is entitled to a hearing because EPA in issuing the administrative order has acted outside its jurisdiction under the CAA.

Request for Relief

19.

The allegations contained in paragraphs 1 to 18 are repeated as if fully enumerated herein.

20.

NRG requests that the June 3, 1987 administrative order be withdrawn and vacated because it is an illegal action by the agency.

21.

NRG requests that EPA issue a notice in the Federal Register that the PSD permit issued to it by FDER on September 25, 1986 is, and at all times has been valid.

22.

In the alternative, NRG requests that EPA's administrative order denying the FDER PSD permit be held to be barred by the statute of limitations. NRG's PSD permit application was determined to be complete on March 18, 1986. The CAA requires that all PSD permit applications be granted or denied not later than one year after the date of filing a completed application. 42 U.S.C. § 7475(c). EPA's administrative order was issued more than one year after NRG's application was determined to be complete.

WHEREFORE, NRG demands a hearing before the administrative law judge of EPA as provided by Section 556 of the Administrative Procedures Act. 5 U.S.C. § 556. Inasmuch as EPA's illegal action has jeopardized financing for the NRG project, NRG requests that this matter be set down for hearing at the earliest possible date.

This _____ day of June, 1987.

Charles H. Tisdale, Jr.

Les Oakes

Attorneys for NRG/Recovery Group

KING & SPALDING
2500 Trust Company Tower
Atlanta, GA 30303
404-572-4600

CERTIFICATE OF SERVICE

I hereby certify that due and lawful service of the within and foregoing Notice of Appeal and Request for Hearing has been made upon all parties in this matter by hand delivery and by certified mail, return receipt requested, to:

Regional Hearing Clerk
U.S. Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, GA 30365

Jack Ravan
U.S. Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, GA 30365

This ____ day of June, 1987.

_____
Les Oakes

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

MEMORANDUM

DATE: JAN 30 1987

SUBJECT: Lake County Waste to Energy Facility (PSD-FL-113), Okahumpka, Florida

FROM: Wayne J. Aronson, Chief 1/20/87
Program Support Section

THRU: Bruce P. Miller, Chief
Air Programs Branch

TO: James T. Wilburn, Chief
Air Compliance Branch

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Based upon our BACT analyses for particulate and sulfur dioxide emissions (see attachment) in accordance with the interpretation of the North County, California, remand, the PSD permit issued to Lake County does not represent BACT for particulate and SO_2 emissions.

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Background:

On May 20, 1986, the Florida DER issued a PSD preliminary determination for this proposed source and stipulated requirements for acid gas control as BACT. However, the preliminary determination did not adequately address BACT for SO_2 although a scrubber was required.

By letter dated July 2, 1986 (attached), EPA notified the Florida DER that the BACT determination for SO_2 should consider the effect that SO_2 controls would have on unregulated pollutants, such as HCl and dioxin.

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LAKE COUNTY - BACT ANALYSES FOR PARTICULATE AND SO_2

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Taking into consideration the cost of the installation of acid gas control and the amount of air pollutants removed enhances EPA's argument that additional acid gas controls are warranted. For an additional $1,400,000 (annualized operating and capital cost) per year, 452(1) tons per year of HCl, 256(2) tons per year of SO_2, 10.8(3) tons per year of Fl and 1.15(4) tons per year of H_2SO_4 (mist) would be removed. This equates to 720 tons per year of acid and sulfur dioxide removed at a cost of $1944 per ton of acid gases removed or an additional cost of $7.67 per ton of municipal waste incinerated. This cost consideration is reasonable considering dioxin and furan emissions would also be reduced by 90+%, if proper incinerator combustion controls are employed and proper flue gas temperatures are maintained.

---

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