



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

file copy

4APT-APB

SEP 21 1988

Barry Andrews, Project Engineer
Bureau of Air Quality Management
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RECEIVED

SEP 26 1988

DER-BAQM

Re: Pinellas County (PSD-FL-098)

Dear Mr. Andrews:

This is to acknowledge our receipt of your May 19, 1988, letter regarding Pinellas County Resource Recovery facility's (RRF) request to eliminate the requirement for the installation of a carbon monoxide continuous emission monitor (CO CEM) on Pinellas Unit 3. We have determined that installation of a CO CEM on Unit 3 is mandatory and the requirement cannot be deleted from the permit.

The following are our responses to Pinellas County RRF's objections regarding installation of a CO CEM on Unit 3.

Unreasonable Costs Associated With A CO Monitor

Pinellas County has claimed that extra costs will be required to install a CO CEM that is accurate in the 0 to 300 parts per million (ppm) range as required by 40 CFR Part 60, Appendix B, Performance Specification 4, Section 2.3. This section requires that the relative accuracy of the CO monitor be 10 percent of the reference method test results or 5 percent of the applicable standards, whichever is greater. Considering that the anticipated CO concentration is 25 ppm and the applicable standard is 150 ppm, the relative accuracy requirement would be 5 percent of the applicable standard which is 7.5 ppm.

We believe that Pinellas County's contention that a highly accurate CO monitor must be installed is unfounded. According to the technical manuals of several CO CEM manufacturers, an "off-the-shelf monitor" will meet the relative accuracy requirements of Performance Specification 4. In fact, some CO CEM on sources with applicable CO standards as low as 25 ppm have been documented to pass the relative accuracy test.

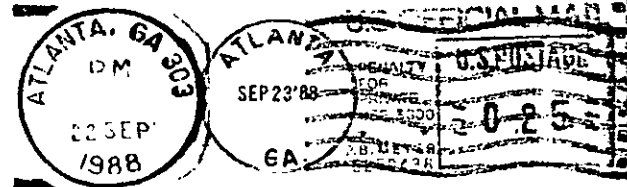
Pinellas County has been quoted a price of \$180,000 to install their CO CEM and auxiliary equipment. We believe that this price is too high and encourage them to obtain additional quotes from other manufacturers.

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION IV
345 COURTLAND STREET
ATLANTA, GEORGIA 30365

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

Air-4

Barry Andrews, Project Engineer
Bureau of Air Quality Management
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400



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SEP 23 1988
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LOW CO EMISSIONS

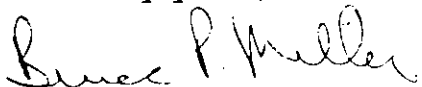
Pinellas also argued that since the present excess air usage prevents the formation of large amounts of CO, monitoring should not be required. We realize the validity of this argument only if the unit is operating on a continuous and uniform basis. In reality, this is not the case because an incinerator operates as a batch process where batches of municipal wastes are fed into the incinerator. Sudden load increases can cause a sharp increase in CO emissions due to poor air, feed mixture, moisture content and uneven temperature zones. This is also true during periods of startup and shutdown when combustion process conditions are less than ideal. Thus, a CO CEM is still warranted to ensure proper control of the process.

ANNUAL CO EMISSION TEST

For municipal waste combustors such as Pinellas Unit 3, an annual CO test is not adequate. As I have mentioned above, the process is not continuous and uniform. Therefore, an annual test may not be representative of the normal process conditions. A CO CEM will ensure continuous compliance by the facility as well as the proper operation of the facility.

For the above reasons, the installation and operation of a CO CEM on Pinellas Unit 3 is mandatory. Since this requirement was also part of the original negotiations for the facility's permit, the requirement will stay in the permit. Thank you for the opportunity to respond to your questions. If you have any additional concerns, please contact me or Wayne Aronson of my staff at (404) 347-2864.

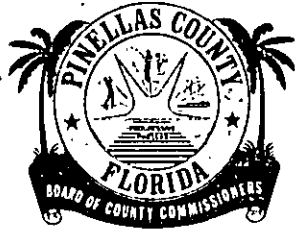
Sincerely yours,



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

copies: CTF/BT

file copy



BOARD OF COUNTY COMMISSIONERS

DEPARTMENT OF SOLID WASTE MANAGEMENT
2800 110TH AVENUE NORTH
ST. PETERSBURG, FLORIDA 33702
PHONE (813) 825-1565



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RECEIVED

MAR 18 1988

DER-BAQM

March 8, 1988

RECEIVED

MAR 14 1988

DIVISION OF ENVIRONMENTAL PERMITTING

Hamilton S. Oven, Jr., P.E.,
Administrator
Siting Coordinations Section
State of Florida, Dept. of Env. Reg.
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Re: EPA, PSD Permit No. PSD-FL-098, Pinellas Unit 3

Dear Mr. Oven:

Further to our letter of December 9, 1987, (attached) this is to request modification of one provision of the referenced permit; namely, removal of the requirement that carbon monoxide emissions be monitored continuously.

As you are aware, Pinellas has always considered the 1984 State PSD to be valid. There is no such requirement in the 1984 State permit. Because of a dispute between the State and EPA, Pinellas was caused to negotiate conditions for a second PSD permit and began doing so during the summer of 1987. During these negotiations, EPA first proposed continuous monitoring of carbon monoxide in a June 9, 1987, draft permit. Pinellas obtained what it considered acceptable order of magnitude costs for this item (\$35,000 for installation, no charge for operation) and Pinellas continued good faith negotiations which were completed several weeks later. Pinellas accepted, without negotiation, continuous monitoring for carbon monoxide.

After more detailed evaluation, we have determined that the monitor is very expensive and it is not the determining factor of efficient combustion (EPA's intent). These matters are discussed in the following paragraphs:

DEPARTMENT OF ENVIRONMENTAL REGULATION

ROUTING AND TRANSMITTAL SLIP

ACTION NO

ACTION DUE DATE

1. TO: (NAME, OFFICE, LOCATION)

Clair Fancy - BAQM

Initial

Date

2.

Initial

Date

3.

Initial

Date

4.

Initial

Date

REMARKS:

Please have your staff review and comment on the attached

INFORMATION

Review & Return

Review & File

Initial & Forward

DISPOSITION

Review & Respond

Prepare Response

For My Signature

For Your Signature

Let's Discuss

Set Up Meeting

Investigate & Report

Initial & Forward

Distribute

Concurrence

For Processing

Initial & Return

FROM:

Buck Over

DATE

PHONE

March 8, 1988

1. The permitted emission rate for CO is 66 lb/hr and the actual emission rate is 4 to 6 lb/hr. During previous tests conducted on Pinellas Unit #3, and specifically during the dioxin tests conducted in February and March, 1987, the CO levels for the boiler were well below the permit level of 150 p.p.m. Review of the data collected in nine runs over six days from this study shows the average CO was 3.8 p.p.m.v.d. corrected to 12% CO₂ with the maximum data point during the test being 11.7 p.p.m. uncorrected. To achieve EPA Relative Accuracy Criteria, the continuous monitor would have to be certified from 300 to 1 ppm (because the actual emission rate is less than 20 ppm). Such a device would be extremely expensive to install and maintain. Signal's quotation (see attached) includes \$180,000 for installation and replacement reserve plus \$450,000 (\$28,000 per year for 16 contract years).
2. The operational guideline for this type of boiler is 100% excess air. With this amount of excess air, generation of significant amounts of CO is difficult, if not impossible. This amount of excess air is required not to promote complete combustion, which can be accomplished at a much lower air to fuel ratio, but to supply adequate air for cooling of the boiler grates and for cooling to control slag formation on the furnace walls. For this reason, the CO emissions will always be well below the permitted values and are not the operational criteria to ensure efficient combustion.
3. Unit #3 permits currently require that CO emissions be determined during each annual test.

In summary, Pinellas County is of the opinion that the continuous requirement is not warranted and should be deleted.

Please advise if we may provide additional information in support of the request.

Sincerely,



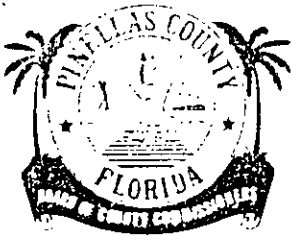
Robert Van Deman, P.E., Director
Solid Waste Management

Copies: Pradeep Raval

Tom Rogers
CHF/BT

RVD:rvt Barry Andicus
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} 3-18-88 (m)



BOARD OF COUNTY COMMISSIONERS

DEPARTMENT OF SOLID WASTE MANAGEMENT
2800 110TH AVENUE NORTH
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PHONE (813) 825-1565



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BRUCE TYNDALL

P.O. BOX 21623
ST. PETERSBURG, FLORIDA 33742-1623

December 9, 1987

Chief, Air Compliance Branch
U.S. Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, GA 30365

COPY

Deputy Chief, Compliance & Ambient Monitoring
Bureau of Air Quality Management
Florida Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32301

Dr. Rick Garrity, District Manager
State Department of Environmental Regulation
4520 Oak Fair Boulevard
Tampa, FL 33610-7347

Pinellas County Dept. of Environmental Management
440 Court Street
Clearwater, FL 34616

Re: Compliance Testing, Pinellas County, Florida, Resource Recovery Facility,
Unit #3 - (PSD-FL-098)

Gentlemen:

We have enclosed one copy of the following documents for each of the listed addressees.

1. Stationary Source Sampling Report,
EEI Ref. No. 5286-A
2. Environmental Engineering Consultants, Inc. -
dust opacity

Please note that the test data confirms compliance with the referenced permit. Pinellas County is currently seeking proposals for the installation of a continuous emission monitor for carbon monoxide and will submit findings accordingly.

Sincerely,

Robert Van Deman, P.E., Director
Solid Waste Management

South Carolina Department of Health and Environmental Control

2600 Bull Street
Columbia, S.C. 29201

Commissioner
Michael D. Jarrett



Board

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Oren L. Brady, Jr., Vice-Chairman
Euta M. Colvin, M.D., Secretary
Harry M. Hallman, Jr.
Henry S. Jordan, M.D.
Toney Graham, Jr. M.D.

January 25, 1988

Mr. Bruce P. Miller, Chief
Air Programs Branch
Air, Pesticides, and Toxics Management Division
United States Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, Georgia 30365

DER
FEB 1
BAQM

Dear Mr. Miller:

This is in response to your letter of October 27, 1987, concerning the guidance memorandum from OAQPS regarding the North County Resource Recovery PSD Remand. While we agree that the policy is mandated under the Clean Air Act, we have several concerns in regard to the interpretation of the Act and implementation of the policy.

The September 22, 1987, memorandum from OAQPS states that "the remand strongly affirms that the permitting authority should take the toxic effects of unregulated pollutants into account in making BACT decisions for regulated pollutants." This has been determined that the BACT analysis should include nonregulated pollutants of "public concern". Since almost all pollutants have some toxicity, this could be interpreted as meaning that all pollutants emitted from a source (even those emitted in trace amounts) should be given an emission limit and included on the permit.

The use of the statement "of possible concern to the public" could cause the permitting agencies to become inundated with unwarranted appeals by individuals seeking to stop the construction of a source for reasons not related to environmental concerns. Since most of rural South Carolina does not have zoning ordinances, appeals of environmental permits are the only mechanism by which industrial growth can be stopped.

Due to the broad interpretation of this policy, the public could claim that the agency did not identify, quantify, and assess the environmental impact of all pollutants of "possible concern to the public" and appeal any permit. It would be almost impossible for the agency to declare that they had addressed every pollutant that could be emitted from a source. An example of this would be municipal waste incinerators. To find out every pollutant from the combustion of municipal waste, an analysis of the waste would have to be performed on a continuous basis. To do this would not be feasible.

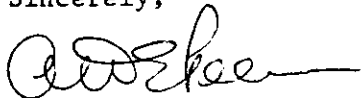
We have serious problems with the placing of the statement that a source would emit toxic air pollutants in the legal notice. This would draw unwarranted attention to a source. While we believe that the public has the right to know what is being emitted, we feel that the application and the agency's analysis of the application, which are on public display, are more appropriate places to discuss toxic air pollutants.

BACT determinations are supposed to be made on a case-by-case basis, but EPA seems to be going away from that, particularly in regards to municipal waste incinerators. Are BACT determinations still case-by-case, or are there specific requirements now? By requiring municipal waste incinerators to have baghouses and an acid gas scrubber is this considered a case-by-case determination? It seems to us all options are being eliminated.

Finally, to retroactively require that all sources that submitted a complete PSD application after June 3, 1986, be subject to all aspects of this policy is inappropriate, since we were not made aware of the policy until November 1987.

Even though the Bureau of Air Quality Control agrees with the intent of the North County Resource Recovery PSD Remand, the policy as outline in the September 22, 1987, memorandum cannot be implemented as it currently stated. Further written guidance is needed before this policy is implemented on sources other than municipal waste incinerators.

Sincerely,



Otto E. Pearson, P.E., Chief
Bureau of Air Quality Control

cc: Region IV states

ROUTING AND TRANSMITTAL SLIP

ACTION NO

ACTION DUE DATE

1. TO: (NAME, OFFICE, LOCATION)

Clair Fancy, BAQM, Tallahassee

Initial

Date

2.

Initial

Date

3.

Initial

Date

4.

Initial

Date

REMARKS:

Please have the appropriate personnel review and respond to the attached letter. I would appreciate a copy of their response.

INFORMATION

Review & Return

Review & File

Initial & Forward

DISPOSITION

Review & Respond

Prepare Response

For My Signature

For Your Signature

Let's Discuss

Set Up Meeting

Investigate & Report

Initial & Forward

Distribute

Concurrence

For Processing

Initial & Return

DER

JAN 19 1988 *BSZ*

BAQM

FROM:

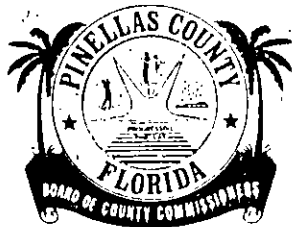
Buck Owen

DATE

1/15/88

PHONE

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PINELLAS COUNTY, FLORIDA

315 COURT STREET

CLEARWATER, FLORIDA 33516

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DER

JAN 19 1988

BAQM

December 31, 1987

Mr. Hamilton S. Oven, Jr. P.E.
 Administrator, Power Plant Siting Coord. Section
 Florida Department of Environmental Regulation
 Twin Towers Office Building
 2600 Blair Stone Road
 Tallahassee, FL 32301-8241

RE: PINELLAS NORTH COUNTY REFUSE-TO-ENERGY FACILITY
 BACKGROUND MONITORING

As referenced in our August 14, 1987 letter to you, Pinellas County is in the initial planning stages for a new municipal refuse fueled power plant to be constructed in the northeast part of the County. The letter requested approval of the County's air monitoring site, No. 4380-002G03; at Brooker Creek Park as the primary background monitoring site. The letter also proposed additional monitoring equipment for the remaining criteria pollutants not currently operated at the site.

In your September 3, 1987 response, it is stated that the Department's Bureau of Air Quality Management (BAQM) acknowledged the site is "satisfactory" in this regard. The letter further stated that the BAQM recommended that PM₁₀ "along with the other criteria pollutants" be included in the monitoring program.

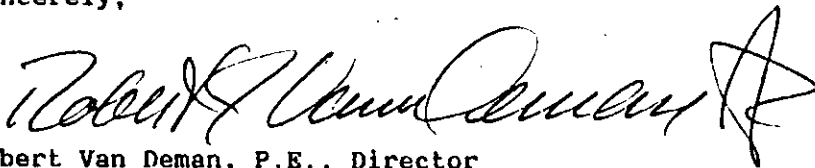
On my behalf, Mr. Peter Hessling with the County's Department of Environmental Management, Air Quality Division, contacted Mr. Tom Rogers of BAQM in order to clarify their recommendation. Mr. Rogers stated that the approval/response was primarily for the site acceptance and that monitoring for all criteria pollutants may not be necessary. He elaborated by saying, "if modeling of certain pollutants shows less than de minimus levels then you don't have to monitor for them." Mr. Rogers also stated that "if some predicted concentrations are greater than de minimus levels then it still may not require monitoring" if it can be justified.

These comments and other issues lead us to ask several questions in order to clarify and fully understand the Departments requirements under Chapter 17-2.500 F.A.C. as they will be applied to this facility.

- 1.) For what pollutants, must the County collect monitoring data, at the proposed station's according to Department determination as stated in Chapter 17-2.500 (5)(f) F.A.C. - "Preconstruction Air Quality Monitoring and Analysis:?"
- 2.) For purposes of background levels and modeling ambient impact analysis, can data from other existing monitoring locations in the County be used instead of starting new monitoring at the proposed site? What site data would the State accept for this approach? For example, in previous applications lead, carbon monoxide, and NO_x data, which indicated maximum values from various areas of the County, were used to calculate maximum ambient impacts when combined with predicted maximum emissions from the facility.
- 3.) Based upon recent changes in EPA and FDER authority, with regard to delegation of PSD permitting and technical review and processing, what are the current procedures, requirements and authority of each agency?
- 4.) According to Chapter 17-2.500(5)(g) - Postconstruction Monitoring, what may the Department require in terms of specific pollutants and siting of an additional monitor station? What are the Department procedures for making this determination?

The County would like to initiate the monitoring program in the spring 1988. Therefore, we would like to resolve these questions as soon as possible in order to proceed with ordering and set-up of the instruments. If you require additional information or if you feel that a meeting with the Department would be beneficial, please call me at (813) 825-1565.

Sincerely,



Robert Van Deman, P.E., Director
Pinellas County Solid Waste Management

PH/wm/0235P

CC: Tom Rogers
Pradeep Ravat
Bobby Andrews } 1-19-88 RAL
CHF/BT