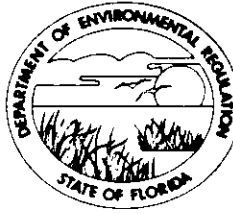


STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY

June 4, 1982

Mr. Dale H. Twachtmann
City of Tampa
306 East Jackson Street
Tampa, Florida 33602

Dear Mr. Twachtmann:

RE: Final Determination - McKay Bay Refuse-to-Energy-Project
Federal PSD Permit Application PSD-FL-086

Enclosed please find the Bureau of Air Quality Management's Final Determination of the referenced Federal PSD application. Final approval of the Federal PSD permit is contingent upon review and acceptance of the permit conditions by the Environmental Protection Agency Region IV office in Atlanta. Questions concerning final issuance of the Federal permit should be directed to Mr. James T. Wilburn of the EPA office.

Please feel free to call if we may be of further help.

Sincerely,

C. H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality
Management

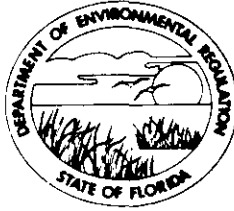
CHF/pa

Enclosure

cc: Ralph Lee Torrens, Henningson, Durham and Richardson
Joe Murdoch, City of Tampa
Robert E. Gilmore, Fish and Wildlife Service
John Christiano, National Park Service
Dan Williams, FDER, Southwest District
Hooshang Boostani, Hillsborough County Environmental
Protection Commission

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

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BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

May 28, 1982

Mr. James T. Wilburn, Chief
Air Management Branch
U. S. Environmental Protection Agency, Region IV
345 Courtland Street
Atlanta, Georgia 30365

Dear Mr. Wilburn:

RE: PSD Permit Application - McKay Bay
Refust-To-Energy Project (PSD-FL-086)

Enclosed please find a copy of the proof of publication of the public notice, the public comments, the Department's response to the public comments, and Final Determination for the subject project. We recommend that the applicant be granted Authority to Construct, subject to the conditions in the Final Determination.

Sincerely,

C. H. Fancy, P.E.
Deputy Bureau Chief
Central Air Permitting

CHF/jf

Final Determination

City of Tampa
McKay Bay Refuse-To-Energy Project
Hillsborough County, Florida

Permit Number
Federal PSD-FL-086

Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting
May 28, 1982

THE TAMPA TIMES

Published Daily
Tampa, Hillsborough County, Florida

State of Florida }
County of Hillsborough } ss.

Before the undersigned authority personally appeared
R. F. Pittman, who on oath says that he is Publisher of The Tampa Times, a daily
newspaper published at Tampa in Hillsborough County, Florida; that the attached copy
of advertisement being a

LEGAL NOTICE

in the matter of Notice of a construction of an air pollution source
is being proposed by the City of Tampa.

was published in said newspaper in the issues of March 22, 1982.

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

R. F. Pittman

Sworn to and subscribed before me, this 7th day
of April, A.D. 19 82

Sinde E. Runyon

(SEAL)

Notary Public, State of Florida at Large
My Commission Expires Jan. 25, 1986

pollution source is being
proposed by the City of
Tampa to be located in the
City of Tampa, Hillsborough
County, Florida. The pro-
posed project is the con-
struction of a 1,000 ton per
day solid waste resource
recovery facility. The con-
struction will increase
emission of air pollutants, in
tons per year, by the follow-
ing amounts:

PM-122.2; Pb-13.6; SO₂-744.6;
NO_x-1,314; CO-745 VOC-39.4;
P-18.4; Hg-1.8; Be-.0012;

The proposed con-
struction has been reviewed
by the Florida Department
of Environmental Regulation
(FDER) under Federal
regulation 40 CFR 52.21,
Prevention of Significant
Deterioration (PSD) and
Chapter 17-2, Florida Ad-
ministrative Code. The
Department has made a
preliminary determination
that the construction can be
approved provided certain
conditions are met. A sum-
mary of the basis for the
determination and the ap-
plication for a federal
permit submitted by the City
of Tampa are available for
public review at the follow-
ing offices:

Bureau of Air Quality
Management, Dept. of En-
vironmental Regulation, 2600
Blair Stone Road, Tallah-
assee, Florida 32301;

Southwest District, Dept.
of Env. Regulation, 7601
Highway 301 North, Tampa,
Florida 33610;

Hillsborough Co. En-
vironmental Protection Com-
mission, 1900 9th Avenue,
Tampa, Florida 33605;

The maximum percent-
ages of allowable PSD in-
crements consumed in the
area of the proposed con-
struction will be as follows:

Annual 24-Hour 3-Hour
PM N/A N/A N/A
SO₂ 10 4 3

Any person may submit
written comments to FDER
regarding the proposed con-
struction. All comments,
postmarked not later than 30
days from the date of notice,
will be considered by FDER
in making a final determina-
tion regarding approval for
construction of this source.
Those comments will be
made available for public
review on request. Further-
more, a public hearing can
be requested by any person.
Such request should be sub-
mitted within 14 days of the
date of this notice. Letters
should be addressed to:

Mr. C. H. Fancy
Bureau of Air Quality
Management
Department of
Environmental Regulation
2600 Blair Stone Road
Tallahassee, Florida 32301
E6295 Mar. 22, 1982

Final Determination
McKay Bay Refuse-To-Energy Project
(PSD-FL-086)

On March 17, 1982, FDER issued a Preliminary Determination that the source could be approved with conditions. The Preliminary Determination was advertised in the Tampa Times on March 22, 1982, and made available for inspection at the Hillsborough County Environmental Protection Commission office, EPA-Region IV office and the FDER's offices in Tallahassee and Tampa.

Comments were received from Mr. Richard D. Garrity, Urban Environmental Coordinator, City of Tampa; and Mr. Robert E. Gilmore, Acting Associate Director, U.S. Department of the Interior, Fish and Wildlife Service, and Mr. Tommie A. Gibbs, Chief, Air Facilities Branch, EPA-Region IV. The comments questioned FDER's Preliminary Determination in several areas. The areas of question and FDER's response are as follows:

Comment 1 (from Robert E. Gilmore)

The insignificant impact on the Chassahowitzka National Wildlife Area and the choice of control technology as representing Best Available Control Technology (BACT) is agreed with. However, it is requested that emissions also be limited in terms of pounds of pollutant per ton refuse burned. This is to ensure BACT is used at all levels of operation.

Response 1

Particulate emissions are limited to 0.025 grain/dscf. This limitation ensures optimum performance of the electrostatic precipitator. Since this limitation is to be complied with at all times, a limitation based on tons of refuse burned would not create any additional benefits. In addition, when the refuse burned is decreased, the amount of stack gas is also decreased. Therefore, the hourly emissions would be decreased thus ensuring BACT is being complied with. For the gaseous emissions, no control equipment is required. Since the mixture of the refuse is not homogeneous, emission rates would not be constant in other processes. The maximum hourly emission rates, however, do not threaten any PSD increment or ambient air quality standard. Therefore, operation at or below these levels would not threaten public health or welfare. In summary, the addition of another emission limitation based upon pounds of pollutant per ton of refuse fired does not appear to provide any substantial benefit and is not included in the final specific conditions.

Comment 2 (from Richard Garrity)

Since emission estimates were based upon average predicted emissions it is requested that the fluoride emission limitation be raised to 6.0 lb/hr and the mercury (vaporous and particulate) emission limitation be raised to 0.6 lb/hr in specific condition #1.

Response 2

FDER agrees that the average emission rates may not reflect what the maximum emission rates may be. The requested emission rates for mercury and fluoride have been examined to determine if any additional permitting requirements would be needed. These emission rates and projected impacts are listed below.

Pollutant	Emissions		Significance Level (TPY)	Projected 24hr Impact	DeMinimus Level
	lb/hr	TPY			
Fluoride	6.0	26.3	3.0	0.33 ug/m ³	0.25ug/m ³
Mercury	0.6	2.6	0.1	0.03 ug/m ³	0.25ug/m ³

It has been determined that these changes would not trigger any new requirements other than those contained in the preliminary determination. Both mercury and fluoride emissions are still above the annual significance levels. Therefore, BACT still needs to be determined. The proposed emission rates do not change the BACT determination of applicable control equipment. Therefore, the BACT determination is changed only to reflect these revised emission rates. The projected air quality impacts have been examined to determine if the preconstruction monitoring requirement would be triggered. The projected impact of the mercury emissions is still below the de minimus level. The projected impact of the fluoride emissions slightly exceeds the de minimus level. However, FDER has determined that modeling may be used in lieu of monitoring of fluorides. The projected impact is still much

less than the threshold limit value (TLV) of 2.5 mg/m³ and therefore is not expected to present any health effects. The combination of the vaporous and particulate mercury into a single emission limitation does not appear to negate the intent of the emission limitation. Since both vaporous and particulate mercury are collected in the sampling train, the total mercury emissions are readily available. Also, since the total emission of mercury were modeled to estimate impact, there does not appear to be any disadvantage in having total mercury emission limitation. Therefore FDER agrees with this change in specific condition #1.

Comment 3 (from Richard Garrity)

A request is made that general condition number 5 be revised from a five day notification of failure to comply with emission limitations to a ten business day notification period.

Response 3

The intent of this condition is to require notification without significant delay on the part of the applicant. FDER realizes that part of the five day period may contain the weekend. The ten business day notification period should be sufficient to alleviate any problems. Therefore, general condition number five is changed to a ten business day notification period. The other comment is immaterial. The applicant would not officially know a violation had occurred until the report was received from its consultant.

Comment 4 (from Richard Garrity)

The last sentence of general condition #6 appears to negate the rest of condition #6 and the City requests that this sentence be removed.

Response 4

The Department has reviewed this condition with input from EPA Region IV. It is apparent that the condition may be interpreted in this way. Removal of the last sentence will not alter the intent of this condition. Therefore, the last sentence is deleted in the final determination.

Comment 5 (from Richard Garrity)

The applicant requests that general condition # 8a be changed to read:

"be allowed reasonable access to the permittee's premises or premises under control of the permittee..."

Response 5

The rewording of this part of the general condition does not modify the intent. The agency or its representatives still have the right to enter the applicant's property. Therefore, FDER does not object with this wording and makes this change in the final determination.

Comment 6 (from Tommie Gibbs)

Further clarification concerning the insignificant impact on the Pinellas County sulfur dioxide nonattainment area, such as distance from the source and associated impact, is requested.

Response 6

The Pinellas County sulfur dioxide nonattainment area is 36.9 km to the west-northwest of the resource recovery unit.

Modeling that was performed showed that the 1 ug/m³ annual impact area would extend no more than 10 km from the source and that the source itself would have a maximum impact of only 9 ug/m³, 24-hour average. Therefore, it is concluded that the Pinellas County sulfur dioxide nonattainment area would not be significantly impacted. This item was covered in the state permit.

Comment 7 (from Tommie Gibbs)

TSP offsets should be documented and obtained prior to issuing the PSD permit.

Response 7

Under the new source review requirements (17-2.17(3)(a)), (FAC), for nonattainment areas which were approved by EPA, resource recovery units are exempt from obtaining the offsets prior to construction if a best effort to obtain the offsets were made, all available offsets were secured, and the applicant commits to continue to search and secure offsets when they become available. All sources of particulate were contacted by the City of Tampa but no particulate offsets were available. The requirement to continue to search for offsets was made part of the state construction permit. All requirements for offsets have been met by the City of Tampa.

Comment 8 (from Tommie Gibbs)

Emissions of lead, fluoride, mercury and beryllium are all greater than the significance levels and are subject to BACT, monitoring, and modeling requirements as contained in the PSD regulations.

Response 8

These points were addressed in the preliminary determination. The requirements to be met were brought out in the applicability section. Justification of the BACT limitations was presented in technical Appendix A. The requirements for monitoring and modeling were presented in the source impact analysis section and Technical Appendix B. All pollutants were below the de minimus impact levels and therefore exempt from preconstruction monitoring except for lead and fluoride. For lead, the monitoring data from the existing sites in Hillsborough County were used in the air quality impact analysis. The project impacts were calculated for the criteria pollutants and compared with the PSD increments and ambient air quality standards. The methodology and assumptions used in this analysis are contained in Technical Appendix B of the preliminary determination.

Comment 9 (from Tommie Gibbs)

A condition should be added to the permit to include the New Source Performance Standard Section 60.53, "Monitoring of Operations".

Response 9

A new specific condition is added which requires the recording and reporting of daily charging rates and hours of operation.

Comment 10 (from Tommie Gibbs)

Continuous monitoring requirements for TSP, SO₂ and NO_x should be added to the permit to insure compliance with hourly emission limitations.

Response 10

There are no continuous monitoring requirements contained in the New Source Performance Standard for incinerators. However, the facility is in the particulate nonattainment area. A continuous opacity monitor would aid the applicant with information on the electrostatic precipitator's performance. It would also ensure minimal impact of the facility's particulate emissions. A continuous monitor for sulfur dioxide emissions does not appear to be warranted. The fuel is equivalent to low sulfur fuel and no emission controls are feasible. The stack testing requirement should be sufficient to determine if the emission limitation is being complied with. Likewise a continuous monitor for nitrogen oxide emissions does not appear to be necessary. The combustion temperature is to be held above 1500°F for odor control. Therefore no wide temperature variation is expected that would cause increases in nitrogen oxide emissions. Again, the stack testing requirement should be sufficient to determine

if the emission limitation is being complied with. In summary, a new specific condition is added requiring a continuous opacity monitor be installed and operated.

Item 11

A typographical error is corrected for the beryllium hourly emission rate, from 0.00026 to 0.00046 lb/hr.

GENERAL CONDITIONS

1. The permittee shall notify the permitting authority in writing of the beginning of construction of the permitted source within 30 days of such action and the estimated date of start-up of operation.
2. The permittee shall notify the permitting authority in writing of the actual start-up of the permitted source within 30 days of such action and the estimated date of demonstration of compliance as required in the specific conditions.
3. Each emission point for which an emission test method is established in this permit shall be tested in order to determine compliance with the emission limitation contained herein within sixty (60) days of achieving the maximum production rate, but in no event later than 180 days after initial start-up of the permitted source. The permittee shall notify the permitting authority of the scheduled date of compliance testing at least thirty (30) days in advance of such test. Compliance test results shall be submitted to the permitting authority within forty-five (45) days after the complete testing. The permittee shall provide (1) sampling ports adequate for test methods applicable to such facility, (2) safe sampling platforms, (3) safe access to sampling platforms, and (4) utilities for sampling and testing equipment.
4. The permittee shall retain records for all information resulting from monitoring activities and information indicating operating parameters as specified in the specific

conditions of this permit for a minimum of two (2) years from the date of recording.

5. If, for any reason, the permittee does not comply with or will not be able to comply with the emission limitations specified in this permit, the permittee shall provide the permitting authority with the following information in writing within ten (10) business days of such conditions:

- (a) description of noncomplying emission(s).
- (b) cause of noncompliance,
- (c) anticipated time the noncompliance is expected to continue or, if corrected, the duration of the period of noncompliance,
- (d) steps taken by the permittee to reduce and eliminate the noncomplying emission,

and

- (e) steps taken by the permittee to prevent recurrence of the noncomplying emission.

Failure to provide the above information when appropriate shall constitute a violation of the terms and conditions of this permit. Submittal of this report does not constitute a waiver of the emission limitations contained within this permit.

6. Any change in the information submitted in the application regarding facility emissions or changes in the quantity or quality of materials processed that will result in new or increased emissions must be reported to the permitting authority. If appropriate, modifications to the permit

may then be made by the permitting authority to reflect any necessary changes in the permit conditions.

7. In the event of any change in control or ownership of the source described in the permit, the permittee shall notify the succeeding owner of the existence of this permit by letter and forward a copy of such letter to the permitting authority.

8. The permittee shall allow representatives of the State environmental control agency or representatives of the Environmental Protection Agency, upon the presentation of credentials:

- (a) to be allowed reasonable access to the permittee's premises, or other premises under the control of the permittee, where air pollutant source is located or in which any records are required to be kept under the terms and conditions of the permit;
- (b) to have access to any copy at reasonable times any records required to be kept under the terms and conditions of this permit, or the Act;
- (c) to inspect at reasonable times any monitoring equipment or monitoring methods required in this permit;
- (d) to sample at reasonable times any emission of pollutants;

and

- (e) to perform at reasonable times an operation and maintenance inspection of the permitted source.

9. All correspondence required to be submitted by this permit to the permitting agency shall be mailed to:

Chief, Air Management Branch
U. S. Environmental Protection Agency
Region IV
345 Courtland Street
Atlanta, Georgia 30308

10. The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

The emission of any pollutant more frequently or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

SPECIFIC CONDITIONS

1. The maximum allowable emissions from the resource recovery facility no. 1 shall be:

Pollutant	Emission Limitation
Sulfur dioxide	170.0 lb/hr
Nitrogen Oxides	300.0 lb/hr
Lead	3.1 lb/hr
Fluoride	6.0 lb/hr
Mercury (vaporous and particulate)	0.6 lb/hr
Beryllium 5 grams/24-hour period	0.00046 lb/hr

2. Municipal waste only shall be burned in the facility.

Wastewater treatment plant sludges or hazardous wastes shall not be incinerated.

3. Electric output for sale to Tampa Electric Company (TECO) shall not exceed 25 MW.

4. Hours of operation for the facility shall be 24 hours per day, 7 days per week, 52 weeks per year.

5. An operation and maintenance plan shall be submitted with the state operating permit application and be made part of this permit.

6. Compliance testing for all criteria and NESHAPS pollutants shall be conducted in accordance with the methods contained in 40 CFR 60 and 61. A source testing plan shall be submitted to the Department of Environmental Regulation for approval 90 days prior to testing. The Department shall be notified of compliance testing at least 30 days prior to the testing.

7. The applicant shall record and keep on file the daily charging rate of the facility and the hours of operation of the facility and shall report this information quarterly to the permitting authority.

8. The applicant shall install and operate continuous opacity monitoring equipment.

Final Determination

**City of Tampa
McKay Bay Refuse-To-Energy Project
Hillsborough County, Florida**

**Permit Number
Federal PSD-FL-086**

**Florida Department of Environmental Regulation
Bureau of Air Quality Management
Central Air Permitting
May 28, 1982.**

GENERAL CONDITIONS

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4. The permittee shall retain records for all information resulting from monitoring activities and information indicating operating parameters as specified in the specific

conditions of this permit, for a minimum of two (2) years from the date of recording.

5. If, for any reason, the permittee does not comply with or will not be able to comply with the emission limitations specified in this permit, the permittee shall provide the permitting authority with the following information in writing within ten (10) business days of such conditions:

- (a) description of noncomplying emission(s).
- (b) cause of noncompliance,
- (c) anticipated time the noncompliance is expected to continue or, if corrected, the duration of the period of noncompliance,
- (d) steps taken by the permittee to reduce and eliminate the noncomplying emission,

and

- (e) steps taken by the permittee to prevent recurrence of the noncomplying emission.

Failure to provide the above information when appropriate shall constitute a violation of the terms and conditions of this permit. Submittal of this report does not constitute a waiver of the emission limitations contained within this permit.

6. Any change in the information submitted in the application regarding facility emissions or changes in the quantity or quality of materials processed that will result in new or increased emissions must be reported to the permitting authority. If appropriate, modifications to the permit

may then be made by the permitting authority to reflect any necessary changes in the permit conditions.

7. In the event of any change in control or ownership of the source described in the permit, the permittee shall notify the succeeding owner of the existence of this permit by letter and forward a copy of such letter to the permitting authority.

8. The permittee shall allow representatives of the State environmental control agency or representatives of the Environmental Protection Agency, upon the presentation of credentials:

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- (b) to have access to any copy at reasonable times any records required to be kept under the terms and conditions of this permit, or the Act;
- (c) to inspect at reasonable times any monitoring equipment or monitoring methods required in this permit;
- (d) to sample at reasonable times any emission of pollutants;

and

- (e) to perform at reasonable times an operation and maintenance inspection of the permitted source.

9. All correspondence required to be submitted by this permit to the permitting agency shall be mailed to:

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U. S. Environmental Protection Agency

Region IV

345 Courtland Street

Atlanta, Georgia 30308

10. The conditions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

The emission of any pollutant more frequently or at a level in excess of that authorized by this permit shall constitute a violation of the terms and conditions of this permit.

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7. The applicant shall record and keep on file the daily charging rate of the facility and the hours of operation of the facility and shall report this information quarterly to the permitting authority.

8. The applicant shall install and operate continuous opacity monitoring equipment.