Florida Department of Environmental Regulation

Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

April 17, 1992

Ms. Nancy McCann
Urban Environmental Coordinator
City of Tampa
Solid Waste Department
City Hall Plaza 5N
Tampa, Florida 33602

Dear Ms. McCann:

Re: City of Tampa McKay Bay Resource Recovery Facility
DER Permit No. AO 29-114760

The Florida Department of Environmental Regulation has received and reviewed you letter dated December 16, 1991, concerning the disposal of waste tires at the City of Tampa's McKay Bay Resource Recovery Facility. The Department recognizes that waste tires frequently are disposed of at resource recovery (waste-to-energy) facilities in Florida. The Department does not object to the combustion of waste tires in resource recovery facilities at a maximum 3% level. The Department recently issued a memorandum dated April 16, 1992, which confirms our general policy concerning this issue.

In light of the Department's general policy, the Department does not object to the City of Tampa's historic practice of disposing of waste tires at the McKay Bay facility. We have reviewed the City's permit and confirmed that the City's permit does not expressly prohibit such practices. Given these facts, we have concluded that the City may lawfully dispose of waste tires at the McKay Bay facility, subject to the terms of the City's existing permit, so long as the quantity of waste tires does not exceed 3% of the total weight of waste material handled at the facility.

Sincerely,

C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/kt

Enclosure

cc: J. Campbell
B. Thomas

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee

To _____ Location _____
To _____ Location _____
To _____ Location _____
From _____ Date _____

Interoffice Memorandum

TO: District Waste Program Administrators
District Air Program Administrators
County Air Program Administrators

FROM: Steve Smallwood, Director
Division of Air Resources Management

John Ruddell, Director
Division of Waste Management

SUBJ: Tire Burning at Municipal Waste Combustors and Resource Recovery Facilities

DATE: April 16, 1992

This joint memorandum is to clarify the Division of Air Resources Management's and the Division of Waste Management's guidance on the use of municipal waste combustors and resource recovery facilities to dispose of tires through incineration.

Tires (shredded and whole) may be processed/fed to these units up to 3%, by weight, of the permitted capacity without any change in the existing permits.

However, any desire to process/feed tires above the 3% level will be considered a modification and the owner/operator of the source(s) will be required to obtain the necessary document(s) (i.e., construction permit modification) prior to increasing the processing/feed rate of the tires. This type of activity will require a Florida P.E. sealed application for a modification, processing fee, public notice, and additional air emission testing to determine the suitability of the unit for the processing of tires. The Air Construction Permit Modification will be processed by the Bureau of Air Regulation's Permitting and Standards Section. However, waste-to-energy facilities certified under the Power Plant Siting Act would require a modification of the certification. Submission of the same information by a Florida P.E. using the same forms you listed would be required. The $10,000 modification fee would apply in those cases.

If you have any questions on the above, please contact Barry Andrews at (904)488-1344 or SunCom 278-1344.

SS/BM/rbm

P 710 058 528

Certified Mail Receipt

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

UNITED STATES POSTAL SERVICE

Sent to Ms. Nancy McCann, City of	
Street & No. City Hall Plaza 5N Tampa	
P.O., State & ZIP Code Tampa, FL 33602	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	$
Postmark or Date Mailed: 4-17-92 Permit: AO 29-114670	

PS Form 3800, June 1990

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece next to the article number.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Ms. Nancy McCann
Dity of Tampa
Solid Waste Department
City Hall Plaza 5N
Tampa, FL 33602

4a. Article Number
P 710 058 528

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery
APR 20 1992

5. Signature (Addressee)

6. Signature (Agent)

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, October 1990 ☆U.S. GPO: 1990—273-861 **DOMESTIC RETURN RECEIPT**

CITY OF TAMPA

Sandra W. Freedman, Mayor

SOLID WASTE DEPARTMENT
Office of Environmental Coordination

February 7, 1992

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

Dear Mr. Fancy:

Mirza Baig requested that the City of Tampa resubmit our request for a construction permit amendment for the McKay Bay Refuse-to-Energy Facility. The last two letters (copies attached) sent to the Department accurately summarize the City's request for an increased charging rate. The City has not actively pursued this request during the last year due to the pending EPA emission guidelines for existing municipal waste combustors.

Please resubmit our request for an amendment. Please contact Greig Grotecloss, of my staff at (813) 227-7832 if you have any questions regarding this request.

Thank you for your assistance with this matter.

Sincerely,

Nancy McCann
Urban Environmental Coordinator

NM/GG/md

n:fancy.2

cc: William D. Engel, Wheelabrator McKay Bay, Inc.
Mirza Baig, Department of Environmental Regulation
Darrel Graziani, Environmental Protection Commission
D. Hanna, SWD
BAPL

CITY OF TAMPA

Sandra W. Freedman, Mayor

SOLID WASTE DEPARTMENT

Office of Environmental Coordination

May 2, 1990

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

Dear Mr. Fancy:

This letter is a follow-up to my letter to you dated November 30, 1989 (copy attached). Since that time, Greig Grotecloss of my staff has spoken with Pradeep Raval of your staff regarding additional information DER would need to amend the construction permit for the McKay Bay Refuse-to-Energy Facility. Since Pradeep is no longer with the Department, I felt it would be wise to request written guidelines on what additional information will be necessary.

Please contact Greig at (813) 223-8071 if you have any questions regarding this request. Thank you for your assistance with this matter.

Sincerely,

Nancy McCann
Urban Environmental Coordinator

NMc/me:A

c: William D. Engel, Wheelabrator McKay Bay, Inc.

CITY OF TAMPA

Sandra W. Freedman, Mayor

SOLID WASTE DEPARTMENT

Office of Environmental Coordination

November 30, 1989

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

RE: Permit Amendment for McKay Bay Refuse-to-Energy Facility - Permit No. AC29-47277, PSD-FL-086

Dear Mr. Fancy:

Attached is an updated emissions summary containing all data available for the McKay Bay Refuse-to-Energy Facility. The Department requested this during a meeting on October 20, 1989.

The City of Tampa requests two permit amendments as were discussed on October 20, 1989.

1. Increase the maximum charging rate to a weekly total based on the maximum daily charging rate that will not exceed the PSD thresholds. Our calculations indicate this value will be about 7,455 tons per week. We prepare the calculation of tons burned for the week every Monday morning.

2. Conduct compliance testing based on a design steam flow of 52,100 pounds per hour per boiler ±10% instead of a maximum charging rate. The maximum charging rate varies according to the moisture content of the refuse. The steam flow is a much more accurate and easier parameter to measure during the compliance test.

City Hall Plaza, 5N • Tampa, Florida 33602 • (813) 223-8071

Please contact Greig Grotecloss at (813) 223-8071 if you would like additional information or have any questions regarding this request.

Sincerely,

Nancy McCann
Urban Environmental Coordinator

NMc/me:32-8

xc: William D. Engel, Wheelabrator McKay Bay, Inc.
Pradeep Raval, DER
Barry Andrews, DER

MCKAY BAY REFUSE-TO-ENERGY FACILITY
EMISSIONS SUMMARY

	Sept 1985	Oct 1987	Dec 1988	Oct 1989	Permit Limits
Particulate	8.07 lb/hr 0.0088 gr/dscf at 12% CO_2	10.4 lb/hr 0.012 gr/dscf at 12% CO_2	13.6 lb/hr 0.016 gr/dscf at 12% CO_2	9.4 lb/hr 0.009 gr/dscf at 12% CO_2	27.9 lb/hr 0.025 gr/dscf at 12% CO_2
SO_2	139.9 lb/hr	79.7 lb/hr	92.1 lb/hr	111.6 lb/hr	170.0 lb/hr
NO_x	94.8 lb/hr	135.8 lb/hr	173.2 lb/hr	230.7 lb/hr	300.0 lb/hr
Lead	0.4 lb/hr	0.3 lb/hr	0.3 lb/hr	.3 lb/hr	3.1 lb/hr
Fluoride	2.3 lb/hr				6.0 lb/hr
Mercury	0.36 lb/hr				0.6 lb/hr
VOC	2.7 lb/hr				9.0 lb/hr
Beryllium	<0.00008 lb/hr				0.00046 lb/hr
Charging Rate	1209 TPD	905 TPD	907 TPD	1051	
Estimated BTU Value	4230	4649	4650	4775	

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

JUL 10 1990

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

Re: McKay Bay Refuse-to-Energy Facility
Florida Power Corporation, Crystal River

Dear Mr. Fancy:

On June 28, 1990, Mr. Mirza Baig of you staff requested that we provide comments to you regarding the pending permit actions applicable to the above referenced facilities. Our comments on each project are as follows:

MCKAY BAY REFUSE-TO-ENERGY FACILITY

In a letter dated November 30, 1989, from McKay Bay to you, two modifications of the facility's Prevention of Significant Deterioration (PSD) permit are requested.

First, McKay Bay wishes to change the permitted charging rate of 1,000 tons per day to a rate of 7,455 tons per week. This is a similar request to their June 15, 1989, letter to you which McKay Bay requested an increase from a charging rate of 1,000 tons per day to 1,075 tons per day. As our records indicate, we provided you with comments on their June 15, 1989, request via an August 2, 1989, letter. In our letter we informed your agency that the requested increase would appear to trigger a PSD review for several pollutants. As you are aware, the calculation for determining applicability to PSD is based on the difference between old actual emission (the average rate in tons per year that the facility actually emitted the pollutants) and the new potential to emit (allowable emissions). We have not received any revised calculations from your agency or McKay Bay to show that PSD would be avoided if the requested charging rate increase were approved.

Second, McKay Bay has requested that compliance testing be based on a design steam flow of 52,100 pounds per hour per boiler instead of a maximum charging rate. Since the measurement of boiler steam production is a more accurate parameter than charging rate, we are not opposed to this request.

On a related matter concerning McKay Bay, our last conversations with your agency indicated that an annual testing requirement for measuring carbon monoxide emissions was to be added to the permit. We would appreciate any new information you may have on this matter.

FLORIDA POWER CORPORATION, CRYSTAL RIVER

Mr. Baig has asked us to review Florida Power Corporation's May 30, 1990, letter to you regarding the revised Technical Evaluation and Preliminary Determination for the Crystal River Units 1, 2, and 3 helper cooling towers. We have no comments on the Company's requested changes to your revised determination except to note that the appropriate source test method for particulate matter emissions should be an alternative of Method 5 with a deionized water probe wash. Please contact Paul Reinermann of my staff for more detail of this procedure.

If you have any additional questions, please call me at (404) 347-2864.

Sincerely,

Mark Armentrout

for Brian Beals, Chief
Source Evaluation Unit
Air, Pesticides and Toxics
Management Division

Copy: Clair Fancy
Mary Barry
Barry Andrews

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

AUG - 2 1989

4APT/APB-aes

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

Re: Permit Amendment for McKay Bay Refuse-to-Energy Facility, Permit No. AC 29-47277, PSD-FL-086

Dear Mr. Fancy:

This is to acknowledge receipt of the additional information regarding the proposed increase in throughput for McKay Bay Refuse-to-Energy Project and to confirm the July 18, 1989, telephone conversation between Pardeep Raval of your staff and Mark Armentrout of my staff. We have reviewed the additional information and have the following comments:

According to the definition of "major modification" and "net emissions increase" defined in the Federal and State Prevention of Significant Deterioration (PSD) regulations, it appears that the source will be required to undergo a PSD review, including a best available control technology (BACT) review for:

1. Particulate Matter (PM)
2. Lead (Pb)
3. Sulfur Dioxide (SO_2)
4. Nitrogen Oxides (NO_x)
5. Fluorides (Fl)
6. Mercury (Hg), and
7. Beryllium (Be)

As you know, a major modification is defined in the PSD regulations as:

> "any physical change in or change in the method of operation of a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the Act."

A physical change or change in the method of operation does not include an increase in the production rate, "unless this change would be prohibited under any federally enforceable permit condition which

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

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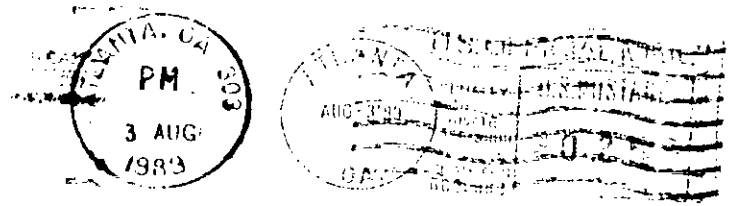


Mr. Clair H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Control
FL Dept. of Environmental
Regulation
2600 Blair Stone Rd.
Tallahassee, FL 32399-2400

was established after January 6, 1975, pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR Subpart I or 40 CFR 51.166." Since the proposed increase in throughput would be prohibited under the existing permit conditions, we have concluded that PSD will apply to the aforementioned pollutants.

According to our calculations, a PSD review will be required unless allowable emission rates are lowered such that significance levels are not exceeded (see Table 1).

By copy of this letter we are notifying the City of Tampa of this matter.

If you have any questions or comments concerning our review, please feel free to contact me or Mark Armentrout of my staff at (404) 347-2864.

Sincerely yours,

Bruce P. Miller

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

cc: Ms. Nancy McCann
Urban Environmental Coordinator
City of Tampa
4010 W. Spruce Street
Tampa, Florida 33607

T A B L E 1

Data on Emissions for McKay Bay Refuse-to-Energy Project

Pollutant	Current Allowable lb/hr (TPY)	Average of Old Actual Emissions TPY	Current Allowables - Old Actual Emissions TPY	Significance Level TPY
PM	27.9 [122.2]	46.83	75.37	25.0
SO_2	170.0 [744.6]	455.1	289.5	40.0
NO_x	300.0 [1314]	589.5	724.5	40.0
Fl^-	6.0 [26.28]	10.1	16.18	3.0
Hg	0.6 [2.63]	1.6	0.7	0.1
VOC	9.0[39.42]	11.8	27.62	40.0
Be	4.6×10^{-4} [2×10^{-3}]	3.5×10^{-4}	1.65×10^{-3}	4×10^{-4}
CO	no limit	95.9	-	100.0
Pb	3.1 [13.6]	1.47	12.13	0.6

Florida Department of Environmental Regulation
Twin Towers Office Bldg. ● 2600 Blair Stone Road ● Tallahassee, Florida 32399-2400
Bob Martinez, Governor Dale Twachtmann, Secretary John Shearer, Assistant Secretary

July 7, 1989

Mr. Wayne Aronson
U.S. EPA, Region IV
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Dear Mr. Aronson:

Re: Permit Amendment for McKay Bay Refuse-to-Energy Facility
Permit No. AC 29-47277, PSD-FL-086

Enclosed is additional information regarding the above referenced project located in Tampa, Hillsborough County, Florida. If you have any questions, please call Pradeep Raval at (904)488-1344 or write to me at the above address.

Sincerely,

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

CHF/PR/t

enclosure

cc: C. Shaver, NPS

CITY OF TAMPA

Sandra W. Freedman, Mayor

SOLID WASTE DEPARTMENT

Everett W. Bass
Director

June 15, 1989

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

Dear Mr. Fancy:

Enclosed is a summary of all available emissions testing data for the McKay Bay Refuse-to-Energy Facility. A chart is also attached showing how the daily charging rate varies as a function of moisture content. Our calculations indicate that the PSD increment for NO_X is exceeded at an average charging rate of 1075 TPD. We still maintain that our increased charging rate is due to high moisture content and will not correlate to increased emissions, but we realize this does not fit the methodology of the PSD review process. Therefore, we would like to propose the following permit amendments that will suit our needs and be consistent with the PSD review process.

1. Increase the charging rate to 1075 TPD based on a thirty day rolling average with an annual limit of 365,000 tons. This allows us to increase our charging rate during the rainy season without exceeding the PSD increments on a daily basis or causing any increase of pollutants on an annual basis.

2. Conduct compliance testing based on a design steam flow of 52,100 pounds per hour per boiler ±10% instead of a maximum charging rate. The maximum charging rate varies according to the moisture content of the refuse. The steam flow is also a much more accurate and easier parameter to measure during the compliance test.

3. Keep the current maximum heat input rate unchanged at 9,000 MMBTU per day. This will reinforce our position that the increased charging rate is due to increased moisture content and not an increase in the actual dry weight of the refuse being charged.

The McKay Bay Refuse-to-Energy Facility has processed 308,000 and 310,000 tons the last two years and the annual charging rate is not expected to ever exceed 330,000 tons per year. The permit amendments will not result in any overall increase in the amount of refuse burned per year or the amount of pollutants emitted per year. The amendments will allow the facility to maintain good combustion conditions when the moisture content of the refuse increases or decreases and a higher or lower charging rate is necessary to maintain the proper heat input to the furnaces.

We would like to present our data and arguments to EPA/DER in person if you feel this would be productive. Please contact Greig Grotecloss at (813) 223-8071 if any additional information is needed or if you would like to arrange a meeting to discuss these amendments. I greatly appreciate your assistance in resolving this matter.

Sincerely,

Nancy McCann
Urban Environmental Coordinator

NMc/GG/me:32-29

xc: William D. Engel

McKAY BAY REFUSE TO ENERGY FACILITY

EMMISIONS ANALYSIS

	PART	LEAD	SO2	NOX	FLUORIDE	MERCURY	VOC	BERYLLIUM	CO
PERMIT LIMITS (LB/HR)	27.9	3.1	170.0	300.0	6.0	0.6	9.0	0.00046	NO LIMIT
1985	PART	LEAD	SO2	NOX	FLUORIDE	MERCURY	VOC	BERYLLIUM	CO
EMISSIONS (LBS/HR)	8.1	0.4	139.9	94.8	2.3	0.4	2.7	0.00008	21.9
EMISSIONS (TONS/YR)	35.3	1.8	612.8	415.2	10.1	1.6	11.8	0.00035	95.9
ALLOWABLE EMISSIONS INCREASE (TPY)	25.0	0.6	40.0	40.0	3.0	0.1	40.0	0.00040	100.0
ALLOWABLE THRUPUT INCREASE (TPD)	855	414	79	116	360	77	4089	1380	1260
1987	PART	LEAD	SO2	NOX	FLUORIDE	MERCURY	VOC	BERYLLIUM	CO
EMISSIONS (LBS/HR)	10.4	0.3	79.7	135.8					
EMISSIONS (TONS/YR)	45.6	1.3	349.1	594.8	0.0	0.0	0.0	0.00000	0.0
ALLOWABLE EMISSIONS INCREASE (TPY)	25.0	0.6	40.0	40.0	3.0	0.1	40.0	0.00040	100.0
ALLOWABLE THRUPUT (TPD)	496.7	413.2	103.7	60.9	ERR	ERR	ERR	ERR	ERR
1988	PART	LEAD	SO2	NOX	FLUORIDE	MERCURY	VOC	BERYLLIUM	CO
EMISSIONS (LBS/HR)	13.6	0.3	92.1	173.2					
EMISSIONS (TONS/YR)	59.6	1.3	403.4	758.6	0.0	0.0	0.0	0.00000	0.0
ALLOWABLE EMISSIONS INCREASE (TPY)	25.0	0.6	40.0	40.0	3.0	0.1	40.0	0.00040	100.0
ALLOWABLE THRUPUT (TPD)	381	414	90	48	ERR	ERR	ERR	ERR	ERR
AVERAGE ALLOWABLE INCREASE (TPD)	577	414	91	75	360	77	4089	1380	1260
AVERAGE TOTAL THRUPUT (TPD)	1577	1414	1091	1075	1360	1077	5089	2380	2260

McKAY BAY FACILITY
HHV VS THRUPUT ANALYSIS

BOILER INPUT BTU/DAY	HHV BTU/LB	TOTAL TPD	TOTAL TPD REFUSE	TOTAL TPD MOISTURE	PERCENT MOISTURE	TONS PER HOUR/LINE
9E+09	2000	2250	700	1550	69	23.44
9E+09	2100	2143	700	1443	67	22.32
9E+09	2200	2045	700	1345	66	21.31
9E+09	2300	1957	700	1257	64	20.38
9E+09	2400	1875	700	1175	63	19.53
9E+09	2500	1800	700	1100	61	18.75
9E+09	2600	1731	700	1031	60	18.03
9E+09	2700	1667	700	967	58	17.36
9E+09	2800	1607	700	907	56	16.74
9E+09	2900	1552	700	852	55	16.16
9E+09	3000	1500	700	800	53	15.63
9E+09	3100	1452	700	752	52	15.12
9E+09	3200	1406	700	706	50	14.65
9E+09	3300	1364	700	664	49	14.20
9E+09	3400	1324	700	624	47	13.79
9E+09	3500	1286	700	586	46	13.39
9E+09	3600	1250	700	550	44	13.02
9E+09	3700	1216	700	516	42	12.67
9E+09	3800	1184	700	484	41	12.34
9E+09	3900	1154	700	454	39	12.02
9E+09	4000	1125	700	425	38	11.72
9E+09	4100	1098	700	398	36	11.43
9E+09	4200	1071	700	371	35	11.16
9E+09	4300	1047	700	347	33	10.90
9E+09	4400	1023	700	323	32	10.65
9E+09	4500	1000	700	300	30	10.42
9E+09	4600	978	700	278	28	10.19
9E+09	4700	957	700	257	27	9.97
9E+09	4800	938	700	238	25	9.77
9E+09	4900	918	700	218	24	9.57
9E+09	5000	900	700	200	22	9.38
9E+09	5100	882	700	182	21	9.19
9E+09	5200	865	700	165	19	9.01
9E+09	5300	849	700	149	18	8.84
9E+09	5400	833	700	133	16	8.68
9E+09	5500	818	700	118	14	8.52
9E+09	5600	804	700	104	13	8.37
9E+09	5700	789	700	89	11	8.22
9E+09	5800	776	700	76	10	8.08
9E+09	5900	763	700	63	8	7.94
9E+09	6000	750	700	50	7	7.81
9E+09	6100	738	700	38	5	7.68
9E+09	6200	726	700	26	4	7.56
9E+09	6300	714	700	14	2	7.44
9E+09	6400	703	700	3	0	7.32

MCKAY BAY REFUSE-TO-ENERGY FACILITY
EMISSIONS SUMMARY

	Sept 1985	Oct 1987	Dec 1988	Permit Limits
Particulate	8.07 lb/hr 0.0088 gr/dscf at 12% CO_2	10.4 lb/hr 0.012 gr/dscf at 12% CO_2	13.6 lb/hr 0.016 gr/dscf at 12% CO_2	27.9 lb/hr 0.025 gr/dscf at 12% CO_2
SO_2	139.9 lb/hr	79.7 lb/hr	92.1 lb/hr	170.0 lb/hr
NO_x	94.8 lb/hr	135.8 lb/hr	173.2 lb/hr	300.0 lb/hr
Lead	0.4 lb/hr	0.3 lb/hr	0.3 lb/hr	3.1 lb/hr
Fluoride	2.3 lb/hr			6.0 lb/hr
Mercury	0.36 lb/hr			0.6 lb/hr
VOC	2.7 lb/hr			9.0 lb/hr
Beryllium	<0.00008 lb/hr			0.00046 lb/hr
Charging Rate	1209 TPD	905 TPD	907 TPD	
BTU Value	4230	4649	4650	

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.

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 limitations 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 an 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 and 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 of monitoring methods required in this permit;

(d) to sample at reasonable times any emission of pollutants; and

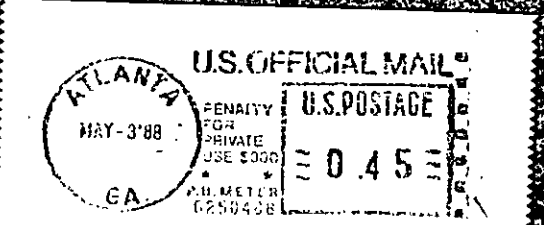
(e) to perform at reasonable times an operation and maintenance inspection of the permitted source.

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 30365

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.



EPA

United States
Environmental Protection
Agency
Region IV
345 Courtland Street, N.E.
Atlanta, GA 30365

Official Business
Penalty for Private Use
$300

Mr. Pradeep Raval
Florida Department of
Environmental Regulation
Twin Tiwers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

Interoffice Memorandum

For Routing To Other Than The Addressee	
To:	Location:
To:	Location:
To:	Location:
From:	Date:

TO: File No. AC 29-114760, PSD - FL - 086

THROUGH: S. Smallwood

THROUGH: C. Fancy

THROUGH: B. Thomas

FROM: P. Raval

SUBJECT: Mckay Bay Incinerator, MSW throughput Increase

DATE: April 14, 1988

The City of Tampa proposes to increase the MSW charging rate of the existing Mckay Bay incinerators from 1000 tons per day (TPD) to 1300 TPD. Testing at the facility has shown that operation at 1000 TPD and 1300 TPD results in emissions below the allowable emission limits.

Although the proposed project will result in an increase in actual emissions, it will not be subject to a PSD review because the Department will rely on the current PSD permit's BACT determined allowable emissions as the basis for evaluating PSD applicability, in accordance with Rule 17-2.100(2) and 17-2.500(2)(d)4, Florida Administrative Code (See attachments).

Therefore since the projected emissions will remain below currently permitted allowables, and since no physical changes are going to be made at the facility for the increased MSW charging rate, the project will not be subject to PSD/BACT requirements.

The Department recommends that the current permit be ammended to reflect a 1300 TPD MSW throughput capacity for the facility, so long as reasonable assurance is provided to establish that allowable emissions will not be exceeded at the higher operating level on an ongoing basis.

PR/jp

cc: L. George
B. Andrews

Attachments

PART I
DEFINITIONS

17-2.100 Definitions. The following words and phrases when used in this chapter shall, unless content clearly indicates otherwise, have the following meanings:

(1) "Acid Mist" - Liquid drops of any size of any acid including but not limited to sulfuric acid and sulfur trioxide, hydrochloric acid and nitric acid as measured by test methods approved by the Department.

(2) "Actual Emissions" - The actual rate of emission of a pollutant from a source as determined in accordance with the following provisions:

(a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the source actually emitted the pollutant during a two year period which precedes the particular date and which is representative of the normal operation of the source.

The Department may allow the use of a different time period upon a determination that it is more representative of the normal operation of the source. Actual emissions shall be calculated using the source's actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.

(b) The Department may presume that source specific federally enforceable allowable emissions for a source are equivalent to the actual emissions of the source.

(c) For a source which has not completed start-up and testing on a particular date, actual emissions shall equal the potential emissions of the source on that date.

(3) "Administrator" - The Administrator of the United States Environmental Protection Agency or the Administrator's designee.

(4) "Adverse Impact on Visibility" - An impairment to visibility which interferes with the management, protection, preservation, or enjoyment of the visitor's visual experience of a Federal Class I area. This determination shall be made on a case-by-case basis, utilizing EPA-approved methods of visibility impairment analysis, if available, and taking into account such factors as the geographic extent, intensity, duration, frequency, and time of visibility impairments, and how these factors correlate with the times of visitor use of the Federal Class I area and the frequency and timing of natural conditions that reduce visibility.

(5) "Affected Pollutant" - In a nonattainment area or area of influence the pollutant for which the area is designated nonattainment is the affected pollutant except in the case of ozone nonattainment areas where the affected pollutant is volatile organic compounds (VOC).

(6) "Air Dried Coating" - Coatings which are dried by the use of air or forced warm air at temperatures up to 194°F (90°C).

(7) "Air Pollutant" - Any substance (particulate, liquid, gaseous, organic or inorganic) which if released, allowed to escape, or emitted, whether intentionally or unintentionally, into the outdoor atmosphere may result in or contribute to air pollution.

(8) "Air Pollution" - The presence in the outdoor atmosphere of the state of any one or more substances or pollutants in quantities

Industrial Classification (SIC) Code would be equal to or greater than 5 tons per year.

3. Modifications to Minor Facilities.

Unless exempted under 17-2.500(2)(a),(b) or (c), a proposed modification to a minor facility shall be subject to the NSR requirements of this section only if the modification would be a physical change which, in and of itself, would constitute a new major facility subject to NSR requirements pursuant to 17-2.500(2)(d)2.

4. Modifications to Major Facilities.

a. Unless exempted under 17-2.500(2)(a),(b) or (c), a proposed modification to a major facility shall be subject to the NSR requirements of this section if:

(i) The facility to be modified would be subject to NSR requirements pursuant to 17-2.500(2)(d)2. if it were itself a proposed new facility; and

(ii) The modification would result in a significant net emissions increase (as set forth in 17-2.500(2)(e)2.) of any pollutant regulated under the Act; or the facility to be modified is located within 10 kilometers of a Class I area and the modification would result in a net emissions increase (as set forth in 17-2.500(2)(e)1.) of any pollutant regulated under the Act, which increase would have an impact on any Class I area equal to or greater than 1.0 microgram per cubic meter (24-hour average).

b. A proposed modification to a major facility shall be subject to the provisions of 17-2.500(2)(d)3., Modifications to Minor Facilities, if the facility to be modified would not be subject to NSR requirements pursuant to 17-2.500(2)(d)2. if it were itself a proposed new facility.

(e) Emissions Increases.

1. Net Emissions Increase.

A modification to a facility results in a net emissions increase when, for a pollutant regulated under the Act, the sum of all of the contemporaneous creditable increases and decreases in the actual emissions of the facility, including the increase in emissions of the modification itself and any increases and decreases in quantifiable fugitive emissions, is greater than zero.

2. Significant Net Emissions Increase.

A significant net emissions increase of a pollutant regulated under the Act is a net emissions increase equal to or greater than the applicable significant emission rate listed in Table 500-2, Regulated Air Pollutants - Significant Emission Rates.

3. Contemporaneous Emissions Changes.

An increase or decrease in the actual emissions or in the quantifiable fugitive emissions of a facility is contemporaneous with a particular modification if it occurs within the period beginning five years prior to the date on which the owner or operator of the facility submits a complete application for a permit to modify the facility and ending on the date on which the owner or operator of the modified facility projects the new or modified source(s) to begin operation. The date on which any increase in the actual emissions or in the quantifiable fugitive emissions of the facility occurs is the date on which the owner or operator of the facility begins, or projects to

60.14 MODIFICATION CONT'D

When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in Appendix C of this part shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Administrator shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.

(c) The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of this part any other facility within that source.

(d) [Reserved]

(e) The following shall not, by themselves, be considered modifications under this part:

(1) Maintenance, repair, and replacement which the Administrator determines to be routine for a source category, subject to the provisions of paragraph (c) of this section and § 60.15.

(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.

(3) An increase in the hours of operation.

(4) Use of an alternative fuel or raw material if, prior to the date any standard under this part becomes applicable to that source type, as provided by § 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.

(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Administrator determines to be less environmentally beneficial.

(6) The relocation or change in ownership of an existing facility.

(f) Special provisions set forth under an applicable subpart of this part shall supersede any conflicting provisions of this section.

(g) Within 180 days of the completion of any physical or operational change subject to the control measures specified in paragraph (a) of this section, compliance with all applicable standards must be achieved.

[40 FR 58419, Dec. 16, 1975, amended at 43 FR 34347, Aug. 3, 1978; 45 FR 5617, Jan. 23, 1980]

§ 60.15 Reconstruction.

(a) An existing facility, upon reconstruction, becomes an affected facility, irrespective of any change in emission rate.

(b) "Reconstruction" means the replacement of components of an existing facility to such an extent that:

(1) The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and

(2) It is technologically and economically feasible to meet the applicable standards set forth in this part.

(c) "Fixed capital cost" means the capital needed to provide all the depreciable components.

(d) If an owner or operator of an existing facility proposes to replace components, and the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, he shall notify the Administrator of the proposed replacements. The notice must be postmarked 60 days (or as soon as practicable) before construction of the replacements is commenced and must include the following information:

(1) Name and address of the owner or operator.

(2) The location of the existing facility.

(3) A brief description of the existing facility and the components which are to be replaced.

(4) A description of the existing air pollution control equipment and the proposed air pollution control equipment.

(5) An estimate of the fixed capital cost of the replacements and of constructing a comparable entirely new facility.

(6) The estimated life of the existing facility after the replacements.

(7) A discussion of any economic or technical limitations the facility may have in complying with the applicable standards of performance after the proposed replacements.

(e) The Administrator will determine, within 30 days of the receipt of the notice required by paragraph (d) of this section and any additional information he may reasonably require, whether the proposed replacement constitutes reconstruction.

(f) The Administrator's determination under paragraph (e) shall be based on:

(1) The fixed capital cost of the replacements in comparison to the fixed capital cost that would be required to construct a comparable entirely new facility;

(2) The estimated life of the facility after the replacements compared to the life of a comparable entirely new facility;

(3) The extent to which the components being replaced cause or contribute to the emissions from the facility; and

(4) Any economic or technical limitations on compliance with applicable standards of performance which are inherent in the proposed replacements.

(g) Individual subparts of this part may include specific provisions which refine and delimit the concept of reconstruction set forth in this section.

[40 FR 58420, Dec. 16, 1975]

§ 60.16 Priority list.

PRIORITIZED MAJOR SOURCE CATEGORIES

Priority Number[1]	*Source Category*
1.	Synthetic Organic Chemical Manufacturing
	(a) Unit processes
	(b) Storage and handling equipment
	(c) Fugitive emissions sources
	(d) Secondary sources
2.	Industrial Surface Coating: Cans
3.	Petroleum Refineries: Fugitive Sources
4.	Industrial Surface Coating: Paper
5.	Dry Cleaning
	(a) Perchloroethylene
	(b) Petroleum solvent
6.	Graphic Arts
7.	Polymers and Resins: Acrylic Resins
8.	Mineral Wool (Deleted)
9.	Stationary Internal Combustion Engines
10.	Industrial Surface Coating: Fabric
11.	Fossil-Fuel-Fired Steam Generators: Industrial Boilers
12.	Incineration: Non-Municipal (Deleted)
13.	Non-Metallic Mineral Processing
14.	Metallic Mineral Processing
15.	Secondary Copper (Deleted)
16.	Phosphate Rock Preparation
17.	Foundries: Steel and Gray Iron
18.	Polymers and Resins: Polyethylene
19.	Charcoal Production
20.	Synthetic Rubber
	(a) Tire manufacture
	(b) SBR production
21.	Vegetable Oil
22.	Industrial Surface Coating: Metal Coil
23.	Petroleum Transportation and Marketing
24.	By-Product Coke Ovens
25.	Synthetic Fibers
26.	Plywood Manufacture
27.	Industrial Surface Coating: Automobiles
28.	Industrial Surface Coating: Large Appliances
29.	Crude Oil and Natural Gas Production
30.	Secondary Aluminum
31.	Potash (Deleted)
32.	Lightweight Aggregate Industry: Clay, Shale, and Slate[2]
33.	Glass
34.	Gypsum
35.	Sodium Carbonate
36.	Secondary Zinc (Deleted)
37.	Polymers and Resins: Phenolic
38.	Polymers and Resins: Urea-Melamine
39.	Ammonia (Deleted)
40.	Polymers and Resins: Polystyrene

[1] Low numbers have highest priority, e.g., No. 1 is high priority, No. 59 is low priority.

[2] Formerly titled "Sintering: Clay and Fly Ash".