



PM
6-9-87
Atlanta, Ga

File 6007

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30365

JUN - 8 1987

4APT/APB-ljf

DER

JUN 11 1987

BAQM

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

Re: Permit Modification Request for Hillsborough County RRF (PSD-FL-104)

Dear Mr. Fancy:

This is in reference to your May 5, 1987, letter transmitting a copy of Ogden Martin Systems of Hillsborough, Incorporated's May 1, 1987, request for a modification to the above-referenced permit. Their request is to raise the emission limits for nitrogen oxides and sulfuric acid mist based on recent stack test results. Your May 5, 1987, letter solicited our comments on Ogden Martin's proposed PSD permit modification.

We concur that the permit be modified in accordance with their request and justification for nitrogen oxides. However, we believe the results of their tests for sulfite concentration as an indication of sulfuric acid mist by EPA reference method 8 is biased high due to concentrations of fluoride and ammonia in the flue gases. As no acceptable test method exists for measuring sulfuric acid mist emissions from municipal solid waste incinerators, and these emissions are estimated based on sulfur dioxide concentrations, we propose that no emissions limits for sulfuric acid mist be included in the revised permit. In this case, we do not feel that such an emissions limit is appropriate since compliance with such a limit could not be determined.

If you have comments or questions regarding this letter, please contact Mike Brandon of my staff at (404) 347-2864.

Sincerely,

Bruce P. Miller

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

copied:

Barry
Tom
Pradcap
6-11-87 BSM

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

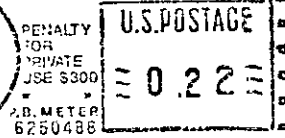
OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE, \$300

AIR-4

Mr. Clair H. Fancy, P.E.
Deputy Chief
Bureau of Air Quality Management
Twin Towers Office Bldg.
2600 Blair Stone Rd.
Tallahassee, FL 32301



U.S. OFFICIAL MAIL



~~Clair~~

6-11-87

20

FYI. Return all
for filing.

Jill
✓ the
Bureau

Requests for a hearing must be postmarked not later than 30 days from the date of this notice and sent to:

(DER contact)

CHF

A special set of circumstances is applicable to this PSD permit application. A permit to construct the source was issued by the Power Plant Siting Board on (date) under the Florida Power Plant Siting Act. At that time, DER considered such a permit to constitute a PSD permit issued under Florida's PSD regulations, which have been approved by EPA. Such approval by EPA transferred permit signature authority for PSD sources from EPA to DER. Subsequent to the issuance of that permit, EPA determined that Power Plant Site Certifications, because of certain procedural differences, do not constitute PSD permits under the DER regulations, and thus do not satisfy the requirements of the federal Clean Air Act. In order to rectify this situation, EPA withdrew authority from DER to issue PSD permits to such sources, but delegated to DER the authority to process the PSD applications in preparation for issuance of a permit by EPA.

Since Florida had already issued a ^{Site Certification} ~~construction permit~~ to [Hillsborough/Pinellas] County, the source had begun construction prior to EPA's determination that the Florida procedure is inadequate. Consequently, EPA issued an administrative order under Section 167 of the Clean Air Act, which required [Hillsborough/Pinellas] County to either immediately apply for a PSD permit or cease construction. Because of the special circumstances surrounding this application, EPA determined that the determination of best available control technology for this source could be made as of the date of the original complete application to Florida for a Power Plant Site Certification permit. Therefore, the draft permit and preliminary determination reflect the best available control technology as of (date) , the date of that application.

ROUTING AND TRANSMITTAL SLIP

Date 1/3/85

TO: (Name, office symbol, room number, building, Agency/Post)

	Initials	Date
1. <u>Clair Fancy</u>		
2.		
3.		
4.		
5.		

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

REMARKS

Attached is a suggested
 public notice to
 Dinella's RRF and
 Hillsborough RRF
 (404) 347-4253

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

FROM: (Name, org. symbol, Agency/Post)

Roger Hoff

Room No.—Bldg.

Phone No.

5041-102

USGPO: 1983-421-529/320

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

Appendix H-1, Permit History/ID Number Changes

Hillsborough County
Hillsborough County Resource Recovery Facility

DRAFT Permit No.: 0570261-002-AV
Facility ID No.: 0570261

Permit History (for tracking purposes):

E.U.						
<u>ID No</u>	<u>Description</u>	<u>Permit No.</u>	<u>Issue Date</u>	<u>Expiration Date</u>	<u>Extended Date</u> ^{1,2}	<u>Revised Date(s)</u>
-001	MSW Incinerator #1	PA-83-19	1/1/84			6/17/86
		PSD-FL-104	7/7/86			
		AO29-206279	6/17/94	8/1/97		
		PSD-FL-121	10/14/87	3/31/88		
-002	MSW Incinerator #2	PA-83-19	1/1/84			1/20/95, 6/29/98 6/17/86
		PSD-FL-104	7/7/86			
		AO29-206279	6/17/94	8/1/97		
		PSD-FL-121	10/14/87	3/31/88		
-003	MSW Incinerator #3	PA-83-19	1/1/84			1/20/95, 6/29/98 6/17/86
		PSD-FL-104	7/7/86			
		AO29-206279	6/17/94	8/1/97		
		PSD-FL-121	10/14/87	3/31/88		
-100	Ash Building & Handling System	PSD-FL-121(B)	6/29/98	3/30/2003		1/20/95, 6/29/98
-101	Lime Storage Silo	PSD-FL-121(B)	6/29/98	3/30/2003		
-102	Activated Carbon Storage Silo	PSD-FL-121(B)	6/29/98	3/30/2003		

(if applicable) ID Number Changes (for tracking purposes):

From: **Facility ID No.:**

To: **Facility ID No.:** 0570127

Notes:

1 - AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.

2 - AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

{Rule 62-213.420(1)(b)2., F.A.C., allows Title V Sources to operate under existing valid permits that were in effect at the time of application until the Title V permit becomes effective}

DER

FEB 3 1986

BAQM

II - 1
Table I-1

~~Revised 12/30/86~~

Hillsborough County Resource Project
Proposed Annual Emission Rates

Pollutant	Proposed Maximum Emission Rate (Ton/Yr)	Significant Emission Rate for PSD Applicability	Significant Emission Rate for Nonattainment Applicability
Particulate Matter (PM) (1)	90	N/A	100
Volatile Organic Compounds (1)	44	N/A	100
Hydrocarbons (VOC) (1)			
Sulfur Dioxide (SO2)	701	40	N/A
Carbon Monoxide (CO)	395	100	N/A
Nitrogen Oxides (NOx)	657	40	N/A
Lead (Pb)	11	0.6	
Mercury (Hg)	1.1	0.1	
Beryllium (Be)	0.003	0.0004	
Fluorides	13	3	
Sulfuric Acid Mist	17	7	
Hydrogen Chloride (HCl) (2)	854	-	

(1) Nonattainment Pollutant

~~(2) HCl is not a regulated pollutant but was included at the department's request.~~

23

V - 1

Revision 12/30/86

Table II-1
Hillsborough County Resource Recovery Project
Source Parameters

Source	UTM-E (km)	UTM-N (km)	SO ₂ (g/s)	Stack Height (m)	Temp. (K)	Exit Vel. (m/s)	Stack Dia. (m)
PSD Sources							
Hillsborough Co. RRF	368.2	3092.7	29.6	67.0	494	16.9	3.50
Pinellas RRF 1-3	335.2	3084.1	31.5	49.1	505	26.8	2.37
McKay Bay RRF	360.0	3091.9	21.4	45.7	500	21.3	1.91
TECO Big Bend	361.9	3075.0	8598	149.4	426	15.6	7.00
NAAQS Sources							
FPC Bartow	342.4	3082.7	722.2	91.4	408	44.0	3.35
FPC Higgins	336.5	3098.5	286.7	53.0	422	10.4	3.81
FPC Anclote #1	324.9	3119.0	1631.9	152.1	416	50.0	3.66
FPC Anclote #2	324.9	3119.0	816.0	152.1	416	28.3	3.66
TECO Hooker Pt. #1)	358.0	3091.0	41.30	85.4	402	18.2	3.40
TECO Hooker Pt. #2)	358.0	3091.0	41.30	85.4	402	18.2	3.40
TECO Hooker Pt. #3)	358.0	3091.0	37.00	85.4	397	11.5	3.70
TECO Hooker Pt. #4)	358.0	3091.0	57.00	85.4	397	11.5	3.70
TECO Hooker Pt. #5)	358.0	3091.0	84.00	85.4	402	18.2	3.40
TECO Hooker Pt. #6)	358.0	3091.0	107.00	85.4	436	17.9	2.90
TECO Gannon #1	360.0	3087.5	282.5	93.3	438	22.5	3.70
TECO Gannon #2	360.0	3087.5	282.5	93.3	438	32.4	3.10
TECO Gannon #3	360.0	3087.5	321.4	93.3	427	35.4	3.20
TECO Gannon #4	360.0	3087.5	421.6	93.3	443	24.6	2.90
TECO Gannon #5	360.0	3087.5	513.4	93.3	415	20.6	4.50
TECO Gannon #6	360.0	3087.5	853.6	93.3	415	23.7	5.40
General Portland	358.0	3090.6	349	44.3	473	6.6	4.72
Gardinier	363.4	3082.4	473.3	29.4	333	9.1	2.10
Gardinier	363.4	3082.4	-210.26	36.5	344	11.8	2.00

Period 12/30/86

V-1
Table ~~II-1~~ (cont.)

Source	UTM-E (km)	UTM-E (km)	SO ₂ (g/s)	Stack Height (m)	Temp. (K)	Exit Vel. (m/s)	Stack Dia. (m)
<u>AMAX (Pt. No.)</u>	393.8	3096.3					
01			12.0	30.5	335.1	12.0	1.37
02			3.3	24.4	315.8	8.9	1.67
03			17.6	46.3	308.6	11.0	1.76
05			29.0	45.7	315.6	15.9	1.76
19			2.8	6.1	550.2	15.3	0.40
20			1.4	3.4	605.2	20.2	0.37
26 - 28			27.1	46.3	298.0	13.1	1.76
29			2.1	10.6	605.2	15.3	0.36
<u>CF Industries (Pt. No.)</u>	380.0	3115.7					
01			6.1	7.5	560.0	19.7	1.07
10			6.2	28.7	316.3	7.2	3.05
11			9.2	54.9	321.9	12.6	2.79
12			13.7	54.9	315.2	9.8	2.79
13			13.7	54.9	324.7	10.5	2.79
<u>Chloride Metals (Pt. No.)</u>	361.8	3008.3					
01			10.1	32.2	346.7	27.8	0.58
04			10.1	29.9	363.0	14.4	0.61
<u>Columbia Paving</u>	366.7	3077.8	3.7	12.2	339.7	22.3	1.37

Revised
12/30/86

V-1
Table ~~II~~-I (cont.)

Source	UTM-E (km)	UTM-E (km)	SO ₂ (g/s)	Stack Height (m)	Temp. (K)	Exit Vel. (m/s)	Stack Dia. (m)
Columbus Company	361.9	3077.8	4.8	12.6	449.7	20.0	1.24
Couch Construction	364.3	3098.1	3.3	10.4	390.8	17.2	1.41
Delta Asphalt	372.1	3105.4	4.8	8.4	381.3	20.6	1.17
Gulf Coast Lead co.	363.9	3093.8	47.2	29.6	347.4	24.9	0.62
IMC Port Sutton	360.1	3087.5	41.5	19.8	338.6	10.5	2.41
<u>Thatcher Glass (Pt. No.)</u>	361.2	3103.3	2.6	41.1	694.1	9.4	1.52
Furnace No. 1			2.6	41.1	656.9	11.4	1.52
Furnace No. 2							
<u>Nitram</u>	363.2	3089.0	3.1	27.4	505.2	10.8	1.37
<u>National Gypsum (Pt. No.)</u>	347.3	3082.7					
Dryer No. 1/Zone 1			0.66	12.5	388.6	8.5	1.07
Zone 2			0.66	12.5	424.7	9.1	0.91
Zone 3			0.66	12.5	330.2	9.1	0.91
Dryer No. 2/Zones 1&2			1.0	10.1	421.9	20.7	0.76
Zone 3			0.5	10.1	408.0	10.4	0.76
Zone 4			0.5	11.3	394.1	25.9	0.91

41

Table ~~II~~-2
 Hillsborough County Resource Recovery Project
 Proposed Maximum Hourly Emission Rates Used
 in Modeling

<u>Pollutant</u>	Emission Rates (1)	
	<u>lb/ton</u>	<u>g/s</u>
Particulate Matter	0.38	3.5
Sulfur Dioxide	3.2	29.6
Carbon Monoxide	1.8	16.6
Nitrogen Oxides	3.0	27.7
Lead	0.048	0.444
Hydrocarbons (non-methane)	0.2	1.85
Mercury	0.0052	0.048
Beryllium	0.00131 0.000131	0.000121
Fluorides	0.06	0.554
Sulfur Acid Mist	0.0768	0.710
Hydrogen Chloride	4.0	37.9

(1) Based on a throughput of 110 percent of design capacity and the operation of four incinerators

V-3

Table ~~II~~-3
 Maximum Air Quality Impacts Of The RRF
 For Comparison To The De Minimus Ambient Levels

<u>Pollutant</u>	<u>Maximum Modeled Concentration (1)(ug/m³)</u>	<u>De Minimus Ambient Impact Level (ug/m³)</u>
SO ₂ (24-hour)	21.6	13
CO (8-hour)	16.3	575
NO ₂ (Annual)	1.0	14
Lead (24-hour)	0.32 0.33	0.1
Mercury (24-hour)	0.035	0.25
Beryllium (24-hour)	0.000088	0.00050
Fluorides (24-hour)	0.405	0.25
Sulfuric Acid Mist	0.52	-
PM (2)	2.6	10

(1) Highest second-high concentration assuming four incinerators

(2) PM included for informational purposes.

V - 4

Table H-4

Hillsborough County 1983 Monitoring Data in the Vicinity of the Proposed Resource Recovery Facility

Pollutant	Site	Location with Respect to the Proposed Facility		Averaging Time	Concentration Category	Concentration (ug/m ³)
		Direction	Distance (km)			
SO ₂	4360-052	278°	9.9	3-hour	Second-high	493
				24-hour	Second-high	86
				Annual	Highest	16
NO ₂	4360-052	278°	9.9	Annual	Highest	35
CO	4360-052	278°	9.9	1-hour	Second-high	12,600
				8-hour	Second-high	5,700
Lead	1800-082	285°	3.3	Calendar quarter	Highest	0.8
PM(1)	1800-082	285°	3.3	24-hour	Second-high	115
				Annual	Highest	54
O ₃ (1)	4360-035	259°	11.5	1-hour	Second Daily High	281

(1) Nonattainment Pollutants

V-5
Table X-5

Comparison of New Source Impacts
with PSD Increments

<u>Pollutant and</u> <u>Averaging Time</u>	<u>PSD Class II</u> <u>Increment (ug/m³)</u>	<u>Predicted Increased</u> <u>Concentration (ug/m³)</u>	<u>Increment</u> <u>Consumed (%)</u>	<u>PSD Class I</u> <u>Increment (ug/m³)</u>	<u>Predicted</u> <u>Increased</u> <u>Concentration (ug/m³)</u>
SO ₂					
3-hour	512	359	73	25	<1
24-hour	91	87	96	5	<1
Annual	20	5	25	2	<<1

47

Revised 12/30/85

Table ^{V-6} XI-6

Comparison of Total Impacts with
Ambient Air Quality Standards

Pollutant and Averaging Time	Maximum Impact Project	Maximum Impacts All Sources (ug/m ³)	Existing Background (ug/m ³)	Maximum Total Impact (ug/m ³)	National Florida AAQS (ug/m ³)
SO ₂					
3-hour	40	453	493	946	1300
24-hour	22	163	86	249	260 365
Annual	1	9	16	25	60 80
CO					
1-hour	32	-	12600	12632	40,000
8-hour	16	-	5700	5716	10,000
NO ₂					
Annual	1	-	35	36	100
Lead					
3-months quarterly	0.05 0.33 ¹	-	0.8	0.8 1.1	1.5

¹ The maximum quarterly average was conservatively estimated by using the maximum 24 hour average

49

MEMORANDUM

DATE: SEP - 9 1986

SUBJECT: PSD Permit For The Hillsborough County Energy
Recovery Facility

PROM: Jack E. Ravan
Regional Administrator

Lee A. DeHihns, III
Deputy Regional Administrator

TO: Thea McManus (PM-223)
Federal Register Officer

On July 7, 1986, the Regional Administrator for Region IV issued a Prevention of Significant Deterioration construction permit to Hillsborough County. The effective date of this permit was August 11, 1986, and allows for the construction of a 1200 ton per day municipal solid waste incineration facility.

This Federal Register notice announces the issuance of this PSD permit. This is not a "rule" or "rulemaking" under Executive Order 12291 and therefore cannot be "major" under that Executive Order. OMB review is not required, nor is review by Headquarters necessary.

Please have this notice forwarded for publication in the "Notices" section of the Federal Register. Questions may be directed to Michael Brandon at (FTS) 257-4253.

PERMIT TO CONSTRUCT UNDER THE RULES FOR THE PREVENTION
OF SIGNIFICANT DETERIORATION OF AIR QUALITY

Pursuant to and in accordance with the provisions of Part C, Subpart 1 of the Clean Air Act, as amended, 42 USC §7470 et. seq., and the regulations promulgated thereunder at 40 CFR §52.21, as amended at 45 Fed. Reg. 52676, 52735-41, (August 7, 1980).

Hillsborough County Department of Solid Waste

is, as of the effective date of this permit (PSD-FL-104) authorized to construct a stationary source at the following location:

0.6 miles North of State Route 60
between Faulkenburg Road
and the TECO transmission line corridor
in Hillsborough County, Florida

Upon completion of authorized construction and commencement of operation/production, this stationary source shall be operated in accordance with the emission limitations, sampling requirements, monitoring requirements and other conditions set forth in the attached Specific Conditions (Part I) and General Conditions (Part II)

This permit is hereby issued on JUL 2 1986
and shall become effective thirty (30) days after receipt hereof unless a petition for administrative review is filed with the Administrator during that time. If a petition is filed any applicable effective date shall be determined in accordance with 40 CFR §124.19(f)(1).

If construction does not commence within 18 months after the effective date of this permit, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time, this permit shall expire and authorization to construct shall become invalid.

This authorization to construct/modify shall not relieve the owner or operator of the responsibility to comply fully with all applicable provisions of Federal, State, and local law.

Date Signed

Regional Administrator

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

PSD PERMIT FOR THE

HILLSBOROUGH COUNTY ENERGY RECOVERY FACILITY

BRANDON, FLORIDA

AGENCY: Environmental Protection Agency.

ACTION: Notice.

SUMMARY: Notice is hereby given that the Prevention of Significant Deterioration (PSD) permit issued to the Hillsborough County Department of Solid Waste on July 7, 1986, became effective on August 11, 1986. The permit was issued for the construction of a 1200 ton per day municipal solid waste incineration facility with electrical generation capability.

DATE: This action is effective as of August 11, 1986, the effective date of the PSD permit. Construction must begin within eighteen (18) months of this date or the permit will become invalid.

ADDRESSES: Copies of the PSD permit, permit application, preliminary and final determinations are available for public inspection upon request at the following locations:

U.S. Environmental Protection Agency
Air Programs Branch
345 Courtland Street, N.E.
Atlanta, Georgia 30365

Bureau of Air Quality Management
Florida Department of Environmental
Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32301

FOR FURTHER INFORMATION CONTACT: Wayne Aronson of the EPA Region IV, Air Programs Branch at the Atlanta address given above, telephone (404) 347-4901; (FTS) 257-4901.

SUPPLEMENTAL INFORMATION: On December 13, 1985, the Hillsborough County Department of Solid Waste submitted an application to construct three 400 ton per day municipal solid waste incinerators near Brandon, Florida. The preliminary determination was issued by the Florida Department of Environmental Regulation (DER) on March 25, 1986, and the public comment period commenced on April 7, 1986. The Final Determination was issued by the Florida DER on May 30, 1986. Comments on the determinations were made by both EPA and the Hillsborough County Department of Solid Waste in reference to various permit conditions. No other comments were received during the public comment period.

The federal PSD permit was issued on July 7, 1986, and became effective on August 11, 1986. The effective date of this permit constitutes final Agency action under 40 CFR §124.19(f)(1) and Section 307 of the Clean Air Act, for purposes of judicial review. Under Section 307(b)(1) of the Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by [60 days from today]. This action

may not be challenged later in proceedings to enforce its requirements (see §307(b)(2)). If construction does not commence within eighteen (18) months after the effective date, that is, by February 11, 1988, or if construction is not completed within a reasonable time, the permit shall expire and the authorization to construct shall become invalid.

(Sections 160-169 of the Clean Air Act (42 U.S.C. 7470-7479).)

DATE: SEP - 9 1986

Lee A. DeHihns, III, Deputy

Lee A. DeHihns, III, Deputy
REGIONAL ADMINISTRATOR

PART I

Specific Conditions

1. Emission Limitations

a. Stack emissions from each unit shall not exceed the following:

- (1) Particulate matter: 0.021 grains per dry standard cubic foot corrected to 12% CO₂ (gr/dscf-12%) or 7.0 pounds per hour per unit, whichever is more restrictive.
- (2) Visible Emissions: Opacity of stack emissions shall not be greater than 15% opacity except that 20% opacity may be allowed for one six-minute period (average of 24 consecutive observations recorded at 15-second intervals) in any one hour. Excess opacity resulting from startup or shutdown shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess opacity shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by EPA for longer duration.

Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during start-up or shutdown shall be prohibited. Opacity of other emission points at the plant shall not exceed 5%.
- (3) VOC: 0.01 gr/dscf-12%, or 0.2 lb/ton, whichever is more restrictive
- (4) SO₂: 0.17 gr/dscf-12% or 3.2 lb/ton, whichever is more restrictive, 24-hour average,
0.45 gr/dscf-12% or 8.5 lb/ton, whichever is more restrictive, 3-hour average
- (5) Nitrogen Oxides: 0.16 gr/dscf-12%, or 3.0 lb/ton, whichever is more restrictive
- (6) Carbon Monoxide: 0.093 gr/dscf-12%, or 1.8 lb/ton, whichever is more restrictive.

- (7) Lead: 0.00104 gr/dscf-12%, or 0.020 lb/ton, whichever is more restrictive.
- (8) Fluorides: 0.0031 gr/dscf-12%, or 0.060 lb/ton, whichever is more restrictive.
- (9) Sulfuric Acid Mist: 0.0040 gr/dscf-12%, or 0.077 lb/ton, whichever is more restrictive.
- (10) Beryllium: 6.8×10^{-7} gr/dscf-12%, or 1.3×10^{-5} lb/ton, whichever is more restrictive.
- (11) Each of the emission limits in conditions (1) and (3) through (10) is to be expressed as a 3-hour average. This averaging time, which is applicable to the emission limits for all pollutants, is based on the expected length of time for a particulate compliance test. The concentration standards in conditions (3) through (10) are included as the primary compliance limit to facilitate simpler compliance testing, since the process weight, in tons per hour, is not easily measured. The concentration limit is intended to be equivalent to the lb/ton limit. The concentration limits were derived by dividing the lb/ton limits by the calculated volume of flue gas produced when one ton of refuse is combusted. If actual process conditions, i.e., dscf per ton of refuse fired, are different than projected by the applicant, EPA may, at its discretion, determine compliance based upon the lb/ton limits.
- (12) Mercury: 2200 grams/day
- (13) The potential for dust generation by ash handling activities will be mitigated by quenching the ash prior to loading in ash transport trucks. Additionally, all portions of the proposed facility including the ash handling facility which have the potential for fugitive emissions will be enclosed. Also those areas which have to be open for operational purposes, e.g., tipping floor of the refuse bunker while trucks are entering and leaving, will be under negative air pressure.
- (14) Each of the three units is subject to 40 CFR Part 60, Subpart E, New Source Performance Standards

(NSPS), except that where requirements in this permit are more restrictive, the requirements in this permit shall apply.

- (15) Only natural gas will be used as an auxiliary fuel.

b. Compliance Tests

- (1) Compliance tests for particulate matter, SO₂, nitrogen oxides, CO, VOC, sulfuric acid mist, fluorides, mercury and beryllium shall be conducted in accordance with 40 CFR 60.8 (a), (b), (d), (e), and (f), except that an annual test will be conducted for particulate matter. Compliance tests for opacity will be conducted simultaneously during each compliance test run for particulate matter.

Compliance tests shall be conducted for such time and under such conditions as specified by EPA prior to the compliance test. These conditions will be specified by EPA upon notification of performance tests as required by General Condition 1. The permittee shall make available to EPA such records as may be necessary to determine the conditions of the performance tests.

- (2) The following test methods and procedures from 40 CFR Parts 60 and 61 shall be used for compliance testing:

- a. Method 1 for selection of sample site and sample traverses
- b. Method 2 for determining stack gas flow rate when converting concentrations to or from mass emission limits.
- c. Method 3 for gas analysis when needed for calculation of molecular weight or percent CO₂.
- d. Method 4 for determining moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits.

- e. Method 5 for concentration of particulate matter and associated moisture content. One sample shall constitute one test run.
 - f. Method 9 for visible determination of the opacity of emissions.
 - g. Method 6 for concentration of SO₂. Two samples, taken at approximately 30 minute intervals, shall constitute one test run.
 - h. Method 7 for concentration of nitrogen oxides. Four samples, taken at approximately 15 minute intervals, shall constitute one test run.
 - i. Method 8 for determination of sulfuric acid mist concentration and associated moisture content. One sample shall constitute one test run.
 - j. Method 10 (continuous) for determination of CO concentrations. One sample constitutes one test run.
 - k. Method 12 for determination of lead concentration and associated moisture content. One sample constitutes one test run.
 - l. Method 25 for determination of volatile organic compounds (VOC) concentration. One sample shall constitute one test run.
 - m. Method 13A or 13B for determination of fluoride concentrations and associated moisture content. One sample shall constitute one test run.
 - n. Method 101A for determination of mercury emission rate and associated moisture content. One sample shall constitute one test run.
 - o. Method 104 for determination of beryllium emission rate and associated moisture content. One sample shall constitute one test run.
- (3) The stack tests shall be performed at +10% of the heat input rate of 150 million Btu per hour per boiler; however, compliance with the particulate matter emission limit shall be at design capacity.

2. The height of the boiler exhaust stack shall be 220 feet above ground level at the base of the stack.
3. The incinerator boilers shall not be loaded in excess of their rated capacity of 36,666 pounds per hour each. 18.3 tons/hr
110%
4. The incinerator boilers shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, rated capacity and certification number.
5. The permittee must submit to EPA and DER within fifteen (15) days after it becomes available to the County, copies of technical data pertaining to the incinerator boiler design, to the electrostatic precipitator design, and to the fuel mix that can be used to evaluate compliance of the facility with the preceding emission limitations.
6. Grease, scum, grit screenings or sewage sludge shall not be charged into the solid waste to energy facility boilers.

7. Electrostatic Precipitator

The electrostatic precipitator shall be designed and constructed to limit particulate emissions to no more than 0.021 grains per dscf corrected to 12% CO₂.

8. Stack Monitoring Program

The permittee shall install and operate continuous monitoring devices for stack oxygen and opacity. The monitoring devices shall meet the applicable requirements of Rule 17-2.710, FAC, 40 CFR Part 60, Subparts A and D, Sections 60.13 and 60.45 respectively, except that emission rates shall be calculated in units consistent with emission limits in this permit. The conversion procedure shall be approved by EPA.

9. Reporting

- a. A copy of the results of the stack tests shall be submitted within forty-five days of testing to the DER Southwest Florida District Office, the Hillsborough County Environmental Protection Commission (HCEPC) and EPA Region IV.
- b. Stack monitoring shall be reported to HCEPC, the DER Southwest District Office and EPA Region IV on a quarterly basis in accordance with Section 17-2.710, FAC, and 40 CFR, Part 60, Subsection 60.7.

10. Fuel

The Resource Recovery Facility shall utilize refuse such as garbage and trash (as defined in Chapter 17-7, FAC) but not sludge from sewage treatment plants as its fuel. Use of alternate fuels would necessitate application for a modification to this permit.

11. Addresses for submitting reports are:

a. EPA - Region IV

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

b. DER

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

c. Southwest District Office of DER

District Manager
Department of Environmental Regulation
7601 Highway 301 N.
Tampa, FL 33610

d. HCEPC

Chief, Air Group
Hillsborough County Environmental
Protection Commission
1900 9th Ave.
Tampa, FL 33605

12. The facility shall provide space for the future installation, if necessary, of a wet or dry flue gas scrubber.

PART II

General Conditions

1. The permittee shall comply with the notification and record-keeping requirements codified at 40 CFR Part 60, Subpart A, § 60.7.
2. The permittee shall retain records of 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.
3. 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 EPA with the following information in writing within five (5) 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 the aforementioned information does not constitute a waiver of the emission limitations contained within this permit.

4. Any proposed change in the information submitted in the application regarding facility emissions or changes in the quantity or quality of materials processed that would result in new or increased emissions or ambient air quality impact must be reported to EPA. If appropriate, modifications to the permit may then be made by EPA to reflect any necessary changes in the permit conditions. In no case are any new or increased emissions allowed that will cause violation of the emission limitations specified herein. Any construction or operation of the source in material variance with the application shall be considered a violation of this permit.

5. 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 and EPA of the change in control or ownership within 30 days.
6. The permittee shall allow representatives of the state and local environmental control agency or representatives of the EPA upon the presentation of credentials:
 - (a) to enter upon 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 Clean Air Act;
 - (c) to inspect at reasonable times any monitoring equipment or monitoring method required in this permit;
 - (d) to sample at reasonable times any emissions of pollutants; and
 - (e) to perform at reasonable times an operation and maintenance inspection of the permitted source.
7. 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..

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Bureau of
Air Regulation

Teresa,

Here is a copy of the PSD permit for Hillsborough RRF (PSD-FL-104). We do not have the actual signed cover page. I also sent a copy of the signed Federal Register notice.

Scott Davis

RECEIVED

AUG 4 1994

E.P.C. OF H.C.
AIR PROGRAM