

COUNTY OF HILLSBOROUGH

MEMORANDUM

Date August 10, 1978

To P. David Puchaty, District Manager, SW District DER

From Joe Griffiths, Environmental Protection Commission

Subject: TECO Permits: Hooker's Point 4 & 6, Gannon 1 & 5

Each facility showed compliance during the latest stack test. The reason each source was permitted till July, 1981 is because: All sources are located in the non-attainment area for TSP and may be contributing to the overall problem. If that is the case some changes in operating time, performance standards, start-up procedures, etc. may be required and the changes could be incorporated into the next permit before the January 1, 1982 deadline.

cc: Files

JG/dj

D.E.R.

AUG 14 1978

SOUTHWEST DISTRICT
TAMPA

10-75 MOD. 2

DEPARTMENT OF ENVIRONMENTAL REGULATION
AIR PERMIT AND INVENTORY SYSTEM
POINT SOURCE CODING FORM

DELETE	1	
ADD	2	
CHANGE	3	✓

STATE	COUNTY	AGCR	PLANT #	POINT ID										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	0	1	8	0	0	0	5	2	0	0	4	0	0	1

YEAR OF RECORD	COMPANY NAME	COMPANY MAILING ADDRESS	COMPANY CITY	ZIP CODE	ACTION
16					
					0 7

YEAR OF RECORD	CONSTRUCTION PERMIT	ISSUE DATE	EXPIRATION DATE	OPERATING PERMIT	ISSUE DATE	EXPIRATION DATE	LATITUDE	LONGITUDE	PERMIT TYPE	SOURCE TYPE	ACTION
	M M D D Y Y	M M D D Y Y	M M D D Y Y	M M D D Y Y	M M D D Y Y	M M D D Y Y					
78	-			A029-7136	092778	070183					0 8

YEAR OF RECORD	FINAL CONTROL PLAN DAT	SUB. OF CONTRACTS TO BE LET	START CONSTRUCTION	END CONSTRUCTION	FINAL COMPLIANCE	TESTING DATE	INSPECTION SCHEDULE	POLLUTANT (IF APP)	ACTION
	M M Y Y	M M D D Y Y	M M D D Y Y	M M D D Y Y	M M D D Y Y	M M D D Y Y	J F M A M J J A S O N D		
16									0 9

YEAR OF RECORD	DESCRIPTION OF POINT SOURCE	ACTION
16		
		1 0

YEAR OF RECORD	MOST RECENT DATE OF EMISSIONS TESTING FOR PARTICULATES	MOST RECENT DATE OF EMISSIONS TESTING FOR SO2	DUE DATE FOR PARTICULATE EMISSIONS TEST RESULTS	DUE DATE FOR SO2 EMISSIONS TEST RESULTS	STATUS CODE	DATE OF RECORDING OF STATUS CODE	TSP FREQ. (CODE)	SO2 FREQ. (CODE)	MOST RECENT DATE OF INSPECTION BY DEPARTMENT	VE FREQ. (CODE)	MOST RECENT DATE OF VISIBLE EMISSIONS TEST	VE - PERM SOURCE CATEGORY	VE - DER	ACTION
	M M D D Y Y	M M D D Y Y	M M D D Y Y	M M D D Y Y		M M D D Y Y			M M D D Y Y		M M D D Y Y			
78	062378	062378	062378	062378	A									1 1

PERMIT WORK SHEET

SOURCE ^{TECO} F. J. GANNON Boiler #1

DATE 9-14-78

COUNTY Hillsborough

TYPE PERMIT A029-7136

ACTION	INITIAL WHEN COMPLETED	DATE
Preliminary Review		
Assigned for Review to		
Review Comments	9-14-78	<i>[Signature]</i>
<p>I have reviewed the plans and applications submitted and find that the above mentioned source will not reasonably be expected to cause pollution in violation of the Department standards, rules and regulations. I recommend approval of this permit.</p>		
Number Assigned		
Permit Issued & Signed		
Permit Logged		
Permit Mailed		
Data Forms Completed		
Permit Denied		

TYPE PERMIT ACTION

DESCRIPTION OF PRIMARY SOURCE

New Source (No related permits)	_____	Boiler	_____
Renewed or modified permit	_____	Solid Waste (Incinerat	_____
Point source deleted	_____	Other Combustion	_____
Point source added	_____	Process	_____
New Source replacing old source	_____	Product (Name)	_____

BRIEF DESCRIPTION OF PROCESS

one 1257 MM BTU/h Bunker C fired oil steam boiler

OPERATING TIME: _____

24

HR/D2

7

Da/Wk

50

Wk

STACK DATA

Height (FT) _____
 Diam. (FT-) _____
 Temp. (OF) _____
 Flow Rate (CFM) _____
 Plume Height (FT) _____
 Common Stack (Explain) _____

in other reports

OPERATING DATA

Process Rate _____
 Process Rate _____ TONS
 Max Design Rate _____ E/H
 Combustion (Units) Gal _____ TONS _____
 Rate _____ Unit/Hr _____ Unit
 Heat Content _____ BTU/G
 Boiler Capacity _____ BTU/H
 Max Design Rate _____ Unit/
 Fuel (Name) _____ SS _____ SA

COMMENTS:

Max $\frac{8044 \times .02}{1257} = 1.02 \text{ SO}_2$

stack test { TSP .04 lb/hr
 SO₂ .86 lb/hr

EMISSIONS

	lb/hr		lb/ton Product		lb/10 ⁶ BTU		Regulation
	Emission	Allowable	Emission	Allowable	Emission	Allowable	
CONSTANT Ethylate	99.5 44	110 110					
SO ₂	946.9	1211.1					
TSP	44	110.1					

ACTIVITY Test _____ Allowable _____

BASES FOR ESTIMATE

- Stack Test Results Date _____ Report Received _____
- V. E. Test Date _____ Report Received _____
- Other tests or emission measurement _____
- Material balance of process using engineering knowledge _____
- Emissions calculated using EPA emission factors _____
- Other Method (Describe): _____

Sequence number assigned by main office
region code 05 Mo Yr 0573 number 7

Section 1

Source name 1 Tampa Electric Company

street address Port Sutton Rd. city Tampa

ZIP 33601 county code 29

(col 1-10 duplicate) Owner or Agent name 2 R. D. Welch

Section 2

street address P.O. Box 111 city Tampa Zip 33601

(col 1-10 duplicate) Application Type code 30 AP

Section 3

Industry Type (SIC code) 17

Location UTM East U7360100 North 3087400

Latitude deg 1 min 12 sec 12 Longitude deg 1 min 13 sec 12

Effluent description Gannon Station

continued effluent description (if needed)

Section 4

(col 1-10 duplicate) 4 Units 1 to 6

Liquid effluent disposal and analysis

Section 5

(col 1-10 duplicate) Type of receiving body - code 5
(surface fresh = 1, salt = 2, etc.)
(central sewer system = 7)

Additional description of surface waters - code 1
(drainage ditch = 1, river = 2, etc.)

station number assigned to influent 14
effluent 26

Record raw influent and final effluent analysis on water quality report forms, use agency code APPLIC if analysis is from applicant.

effluent flow rate MGD 10

5 day BOD load lb/day 46

Liquid effluent additional remarks

Section 6

(col 1-10 duplicate) 6

AIR POLLUTION DISPOSAL AND ANALYSIS

(col 1-10 duplicate) Number of discharges this application 7
 Number of discharges, this site 15 number currently not permitted 16
 Average total flow rate SCFM 21 30
 Total particulate, lb/day 31 40 sulfur oxides, lb/day 41
 nitrogen oxides, lb/day 51 60 fluoride lb/day 61
 other pollutants, lb/day 90

SIGNIFICANT DATES AND PERMIT NUMBERS

(col 1-10 duplicate) Use month-day-year, all dates
 permit issued 8052573 modyyr 11 12 17 Permit number A029-2191 16 27

CONSTRUCTION PERMITS AND TEMPORARY PERMITS


Project completion date 26 35 Permit expires 070175 modyyr 34 39

OPERATING PERMITS

Temporary or old construction permit number 40 47

Implementation schedule:

- A. Estimated filing of application 50 55 modyyr
- B. Estimated start of construction 56 61
- C. Estimated date for compliance 62 69

Gannon #1 

March 10, 1977

D. E. R.

MAR 15 1977

SOUTH WEST DISTRICT
ST. PETERSBURG

Mr. Asa B. Foster, Jr., P.E.
Director
Air and Hazardous Materials
Division
United States Environmental
Protection Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30308

Dear Mr. Foster:

Your letter of February 18, 1977 relative to Tampa Electric's Gannon Facility is answered as follows:

1. Gannon unit number 1. A permit application has been received by the Hillsborough County Environmental Protection Commission (HCEPC). However, HCEPC is holding up sending the application to our District Office until the source passes compliance testing.

The unit was compliance tested in November 1976, but test was rejected by HCEPC. Unit was re-tested on December 16, 1976, but report was not received by our District Office until February 28, 1977, and as yet has not been evaluated.

This unit burns #6 oil, one percent sulfur content, at a maximum rate of 1257 mm BTU/hr.

2. Gannon unit number 2. A permit request has been received by our District Office in October, 1976, but the compliance test was rejected. Unit was re-tested on November 22, 1976, but report was not received by our office until February 28, 1977, and as yet, has not been evaluated.

Mr. Asa B. Foster, Jr., P.E.
Page Two
March 10, 1977

This unit burns #6 oil, one percent sulfur content, at a maximum rate of 1257 mm BTU/hr.

3. Gannon unit number 3 and 4. Permits have been issued to these sources to burn low sulfur fuel oil. See attached permits and their conditions.

Units 1 and 2 will receive valid state permits when source tests have been evaluated and found to be in compliance. Permits will specify using low sulfur fuel. As soon as permits are issued to Gannon 1 and 2, copies of these permits will be forwarded to your office.

Sincerely,

John C. Bottcher
Director
Division of Environmental
Programs

JCB/wbr
attachments

cc: J. P. Subramani
Banks Vest

Submit a separate report for each permitted source by FEBRUARY 28, 1977

SECTION 1: General

SOURCE NAME: Tampa Electric Company (Gannon Unit 1)

MAILING ADDRESS: P. O. Box 111 (Attention: Jeff Rankin)

Tampa, Florida 33601

TELEPHONE NO: 813/879-4111

OPERATING PERMIT NO: None

SOURCE DESCRIPTION: Fossil-fuel steam generator

D. E. R.

APR 15 1977

SOUTH WEST DISTRICT
ST. PETERSBURG

SECTION 2: PROCESS OPERATIONS:

- a. DURATION OF OPERATION AND FREQUENCY: 24 hrs/dy 7 dys/wk 52 wk/yr
e.g. 8 hrs perday, 5 dys per wk and 50 wk/yr. actual hours operation 4075
- b. DESIGN CRITERIA: MAXIMUM OUTPUT 125 MW (from FPC-67 Form)
e.g. 850 MW, 750 tons/dy
- c. ~~NORMAL~~ (AVERAGE) OUTPUT 73.8 MW (during actual hours of operation)
e.g. 424 MW, 670 tons/dy.
- d. MAXIMUM PEAK THAT OCCURED DURING ANY ONE DAY 90 MW
e.g. 910 MW, 810 tons/dy.

SECTION 3: TOTAL AMOUNT OF MATERIALS USED/PROCESSED, COMPUTED ON THE SAME BASIS AS PROCESS WEIGHT:

TYPE(MATERIAL)	INPUT PROCESS WEIGHT- DRY	
		tons/yr
N.A.	N.A.	tons/yr
		tons/yr
		tons/yr

SECTION 4: TOTAL AMOUNT OF FUEL USED. IF FUEL IS OIL, SPECIFY WEIGHT, e.g. NO 2, and % sulfur by weight. INCLUDE STANDBY FUELS.

--	10 ⁶ cu ft	5232	10 ³ gal. NO. 6 OIL .98% SULFUR
--	10 ³ gal PROPANE	--	10 ³ gal KEROSENE
100,739	tons COAL	--	10 ⁶ lb BLACK LIQUOR SOLIDS
OTHER, specify type and units to oil during 1976			

SECTION 5: EMISSION: ESTIMATED/TESTED EMISSIONS(TONS PER YEAR)

- a. 309 tons of particulates 5787 tons of sulfur dioxide
- tons of nitrogen dioxide -- tons of carbon monoxide
- tons of hydrocarbon -- tons (other).
- b. ~~STATE~~ METHOD OF CALULATIONS USED IN DETERMINING EMISSION RATES
 - Particulates - from oil - gal. oil X $\frac{\text{BTU}}{\text{gal.}}$ X $\frac{\text{tons part.}}{\text{BTU}}$ = tons particulate
 - from coal - tons coal X $\frac{\text{BTU}}{\text{T coal}}$ X $\frac{\text{tons part.}}{\text{BTU}}$ = tons particulate
 - SO₂ - from oil - gals. oil X $\frac{\text{BTU}}{\text{gal.}}$ X $\frac{\text{tons SO}_2}{\text{BTU}}$ = tons SO₂
 - from coal - tons coal X $\frac{\text{tons S}}{\text{tons coal}}$ X $\frac{\text{tons SO}_2}{\text{Tons S}}$ X .95 (EPA factor) = tons SO₂

ANNUAL OPERATING REPORT
calendar year 1976

SECTION 5(cont't)

c. STACK TESTED: Oct. 21,22, 1976 date (for particulates and sulfur dioxide)

STACK TEST CONDITIONS: 75 MW PROCESS RATE DURING TEST

STACK TEST CONDUCTED BY: Conservation Consultants, Inc.

Mr. Jose Rodriguez, HCEPC

STACK TEST WITNESSED BY: Mr. Roger Pfaff, EPA, Region IV

SECTION 6.: OPERATIONAL PROBLEMS, IF ANY: Routine

a. IMPROVEMENTS MADE TO PROCESS/POLLUTION CONTROL EQUIPMENT: None

b. TYPE OF MAINTENANCE PERFORMED: Routine

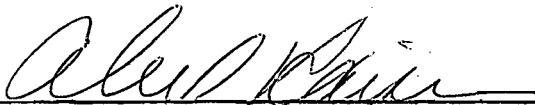
c. NUMBER OF UPSETS LASTING MORE THAN FOUR HOURS DURING THE YEAR: 0

d. NUMBER OF UPSETS LASTING MORE THAN ONE HOUR BUT NOT MORE THAN FOUR HOURS: Unknown

e. NUMBER OF UPSETS LASTING LESS THAN ONE HOUR: Unknown

CERTIFICATION:

I HEREBY CERTIFY THAT THE INFORMATION GIVEN IN THIS REPORT IS CORRECT TO THE BEST OF MY KNOWLEDGE.



Signature of owner or authorized representative

Alex Kaiser, Director of Power Plant Engineering
Typed name and title

April 5, 1977
Date

Additional stack test:

Stack tested: December 16, 1976 for sulfur dioxides
Stack test conditions: 70 MW process rate during test
Stack test conducted by: Environmental Science & Engineering, Inc.
Stack test witnessed by: Mr. Jim Tucker, HCEPC

DER St Pete

Gannon 1



POST OFFICE BOX 111 TAMPA, FLORIDA 33601 TELEPHONE (813) 876-4111

D. E. R.

February 22, 1977

FEB 28 1977

SOUTH WEST DISTRICT
ST. PETERSBURG

RECEIVED

FEB 23 1977

H. C. E. P. C.

Mr. Jim Tucker
Hillsborough County Environmental
Protection Commission
7402 N. 56th St., Bldg. 500
Tampa, Florida 33617

RE: Sulfur Dioxide Emissions Test -
Gannon Units 1 and 2
Particulate Emissions Test -
Hookers Point Units 1, 2 and 3
Tampa Electric Company

Dear Mr. Tucker:

Attached are three copies each of the sulfur dioxide emissions test on Gannon Units 1 and 2 and the particulate emissions test on Hookers Point Units 1, 2 and 3 performed by Environmental Science & Engineering, Inc. As stated in the Executive Summary on Page iii of each report, the results indicate that Gannon Units 1 and 2 were operating within the limits of compliance set forth in 17-2.04(6)(e)2c and that Hookers Point Units 1, 2 and 3 were operating within the limits of compliance set forth in 17-2.04(6)(e)2a and 17-2.04(6)(e)3b of the Rules of the State of Florida Administrative Code.

Also attached are the visible emissions reports for Hookers Point Boilers 1, 2 and 3, Gannon Unit No. 2, and Big Bend Unit No. 2. You will note that at Hookers Point and Big Bend more than one boiler was utilizing the stacks during the tests. However, the emissions were still below the allowable and, therefore, should not be a problem.

Mr. Jim Tucker
February 22, 1977
Page 2

Also attached are copies of the process statement for each of the tests.

If you have any questions or require additional information, please contact us.

Yours very truly,

William N. Cantrell

William N. Cantrell
Engineer
Environmental Planning

WNC:sac
Attachments