

HOPPING BOYD GREEN & SAMS

ATTORNEYS AND COUNSELORS

123 SOUTH CALHOUN STREET

POST OFFICE BOX 6526

TALLAHASSEE, FLORIDA 32314

(904) 222-7500

FAX (904) 224-8551

FAX (904) 425-3415

CARLOS ALVAREZ
JAMES S. ALVES
BRIAN H. BIBEAU
KATHLEEN BLIZZARD
ELIZABETH C. BOWMAN
WILLIAM L. BOYD, IV
RICHARD S. BRIGHTMAN
PETER C. CUNNINGHAM
RALPH A. DEMEO
THOMAS M. DEROSE
WILLIAM H. GREEN
WADE L. HOPPING
FRANK E. MATTHEWS
RICHARD D. MELSON
DAVID L. POWELL
WILLIAM D. PRESTON
CAROLYN S. RAEPPEL
GARY P. SAMS
ROBERT P. SMITH
CHERYL G. STUART

KRISTIN M. CONROY
C. ALLEN CULP, JR.
CONNIE C. DURRENCE
JONATHAN S. FOX
JAMES C. GOODLETT
GARY K. HUNTER, JR.
DALANA W. JOHNSON
JONATHAN T. JOHNSON
ANGELA R. MORRISON
MARIBEL N. NICHOLSON
GARY V. PERKO
KAREN M. PETERSON
MICHAEL P. PETROVICH
DOUGLAS S. ROBERTS
R. SCOTT RUTH
JULIE R. STEINMEYER
OF COUNSEL
W. ROBERT FOXES

September 20, 1994

BY HAND DELIVERY

John C. Brown, Jr., P.E.
Administrator
Air Permitting and Standards
Department of Environmental Protection
111 South Magnolia Street, Suite 29
Tallahassee, Florida 32399-2400

RECEIVED
SEP 20 1994
Bureau of
Air Regulation

RE: Vero Beach Municipal Power Plant, Unit 5
Request to Amend Construction Permit
DEP Permit No. AC 31-184928, PSD-FL-152

Dear Mr. Brown:

On behalf of the City of Vero Beach (City), we are providing the following information in response to the questions presented in your letter of July 27, 1994:

Question No. 1: At what capacity (i.e., load) did you conduct the initial compliance test during January 1994? Please provide the summary page of the compliance test report.

Consistent with 40 CFR 60 Subpart GG, the initial compliance test following the Dry Low NOx Combustor retrofit was conducted at four points within in the normal operating range of the combustion turbine. The tests for natural gas and liquid fuel were conducted at the following loads: 47% (roughly 17 MW), 60% (roughly 22 MW), 75% (roughly 28 MW), and 100% or "base" load (roughly 36 MW). Enclosed (as Attachment A), please find one copy each of the test results at all four loads on each fuel and a copy of the O₂ traverse conducted at the minimum load.

Question No. 2: How will you demonstrate compliance at any given time with the #/MMBtu standards in the permit without continuously monitoring/measuring the consumption of fuels (i.e., natural gas and fuel oil) at all rates?

John C. Brown, Jr., P.E.
September 20, 1994
Page 2

We assume that this question relates to the proposed revision of Specific Condition 16 of the subject permit, which would be renumbered 14 under the City's proposal. The revised language would clarify that continuous monitoring and recording of fuel consumption is required only when 100% fuel oil is fired. As discussed in prior correspondence, 40 CFR 60 Subpart GG requires continuous fuel consumption monitoring for Stationary Gas Turbine with water injection systems for controlling Nox emissions. With the installation of the Dry Low Nox Combustors on Unit 5, water injection is no longer required for controlling Nox emissions during natural gas firing. Therefore, under 40 CFR 60 Subpart GG, the City is not required to monitor fuel consumption during natural gas firing. However, in accordance with the subject permit (No. AC31-184928), the City has installed CEMS to continuously monitor NOx emissions in combined cycle mode. Additionally, the City will utilize the optional protocols specified in 40 CFR Part 75, in lieu of CEMs, to continuously monitor SO₂ and CO₂ emissions. Although the permit also specifies #/MMBtu limits for PM, VOC, CO, Hg, Pb, and sulfuric acid mist, continuous monitoring is not required for these parameters.

Question No. 3: What have your actual emissions been for the past five years? Please provide that calculations and any assumptions.

In response to your request for actual pollutant emissions for the past five years, we have enclosed (as Attachment B) the annual operating reports for all of the units over that time period, as well as summaries of NOx CEM data for Unit 5 from May, 1993, to present. As you know, Unit 5 was permitted in 1991, and, therefore, has not been in service for the entire five year period.

Question No. 4: What parameters change during peak loading versus the compliance test load that require a standard of 60 ppmvd while firing natural gas? If these operating conditions truly justify 60 ppmvd, then, you need to provide the justification and a request to revise the BACT determination.

Combustion parameters associated with Peak Load versus Base Load operation are summarized in the attached copy of the General Electric Estimated Performance specifications of the PG6541(B) Frame 6 Gas Turbine at the City of Vero Beach (Attachment C). While generating an additional 3 megawatts, Peak Load increases the firing temperature of the gas turbine. Although the City would continue to utilize Dry Low NOx burners for NOx control even during Peak Load operation, according to the burner manufacturer (GE), the increased firing temperature would result an increased NOx emission rate of 60 ppm. For that reason, the City has requested a revised NOx limit of 60 ppm while firing natural gas for up to 400 hours of emergency operation at peak load.

Because the City will continue to utilize Dry Low NOx burners and the Department has already determined that Dry Low NOx burners constitute "best available control technology" for NOx control, a revision of BACT determination is not required for the limited relief requested.

John C. Brown, Jr., P.E.
September 20, 1994
Page 3

Moreover, even if considered an operational change, the limited Peak Load authorization, in and of itself, would not trigger PSD review. As you know, an operational change at an existing facility only triggers PSD review if the change results in a significant net emissions increase (i.e., 40 tons/year for NOx) based upon a comparison of actual emissions before and after the change. As illustrated in the following equations, even in the unlikely event that the City required 400 hours of Peak Load operation in a single year, the difference between Peak Load and Base Load operation would increase annual NOx emissions by only 13.0 tons/year:

GE Estimated NOx Emissions at Base Load: 42 lbs/hr
GE Estimated NOx Emissions at Peak Load: 107 lbs/hr

Difference (increase) in NOx Emissions: $107 \text{ lbs/hr} - 42 \text{ lbs/hr} = 65 \text{ lbs/hr}$

Increased Nox emissions resulting from 400 hrs of Peak Load Operation:

$$65 \text{ lbs/hr} \times 400 \text{ hr/yr} / 2000 \text{ lbs/ton} = 13.0 \text{ tons/yr}$$

Since the 13 tons/year increase is well below the 40 tons/year threshold for significant net emission increases of NOx, the proposed permit revision would not trigger PSD or BACT review. Any other post-revision increase in actual emissions would be attributable to increased utilization due to electricity demand. Under EPA's new "WEPCO" rules, emissions attributable to increased electricity demand are excluded in calculating emission increases associated with operational changes at existing electric generating units. See, 40 CFR § 52.21(b)(33)(ii).

Question No. 5: Please provide complete details of all changes made to the emission unit that you alluded to in paragraph 2 on page 2 of your June 3, 1994 letter.

The changes referred to in the June 30, 1994, letter were as follows:

The existing combustion chambers (a total of 10) were completely removed. The new Dry Low Nox Combustors were placed in the combustion chambers. Additional piping was added to support the new Dry Low Nox Combustors. A new water injection skid was added to accommodate the burning of the liquid fuel in the Dry Low Nox Combustors. With the old Combustors, water was sprayed directly over the flames to reduce the thermal Nox emissions. The Dry Low Nox Combustors design calls for the oil and water to emulsify prior to combustion.

Question No. 6: Provide justification to the request for eliminating the fuel oil "gallons/hour" consumption limit.

The "gallons/hour" oil flow rate referenced in the original permit is an artifact of the construction permit application form filed in August, 1990 (Attachment D). As illustrated

below, the oil flow rate was calculated by dividing the maximum heat input by the expected lower heating value of the fuel oil:

$$\begin{aligned} \text{Density} &= 7.05 \text{ lb/gal} \\ \text{Lower Heating Value (LHV)} &= 18,550 \text{ btu/lb} \\ &= 130,800 \text{ btu/gal} \\ \text{Maximum Heat Input} &= 443.3 \text{ mmbtu/hr} \end{aligned}$$

$$\begin{aligned} \text{Oil Flow (gal/hr)} &= 443,300,000 \text{ btu/hr} / 130,800 \text{ btu/gal} \\ &= 3389 \text{ gal/hr} \end{aligned}$$

As you can see, the oil flow rate will only be 3390 gal/hr if the LHV of the oil being fired is 130,800 btu/gal. Unfortunately, however, the fuel oil actually burned will not always have the LHV assumed in the original permit application. In January 1994, for example, the "as burn" analysis of fuel oil was as follows:

$$\begin{aligned} \text{Density} &= 7.149 \text{ lb/gal} \\ \text{LHV} &= 18,277 \text{ btu/lb} \\ &= 130,662 \text{ btu/gal} \end{aligned}$$

$$\begin{aligned} \text{Oil Flow (gal/hr)} &= 443,300,000 \text{ btu/hr} / 130,662 \text{ btu/gal} \\ &= 3393 \text{ gal/hr} \end{aligned}$$

Under the circumstances, the oil flow rate was slightly above the 3389 gal/hr rate referenced in the permit even though the maximum heat input remained the same. Because oil analysis will not always reflect the LHV referenced in the original permit application, the City respectfully requests deletion of the "gallons/hr" oil flow rate to avoid the anomaly illustrated above.

Note: With the new Dry Low Nox Combustors, the heat input while firing oil has changed from 443 mmbtu/hr to 455 mmbtu/hr.

Question 7: Please provide a summary of any known delays in providing electrical service within the industry as a result of a facility not being able to obtain an emergency order.

The City is not aware of any delays in providing electrical service within the industry as a result of the inability to obtain an emergency order. However, the emergency order process results in needless paperwork and expense for both the Department and industry. During the extreme winter storm of February 1991, for example, Fort Pierce Utilities Authority was forced to obtain an emergency order to burn fuel oil due to a threatened natural gas curtailment. Since that time, the Department modified the applicable permit to authorize oil burning under such emergency circumstances. In doing so, the Department crafted permit language which eliminated the need for an emergency order, while at the same time ensuring that the limited

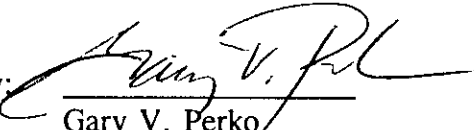
John C. Brown, Jr., P.E.
September 20, 1994
Page 5

authority to burn oil is not abused. See Letter from Steve Smallwood (DER) to Harry Schindehette (FPUA) (June 28, 1991) (Attachment E). The City of Vero Beach simply requests similar permit language to avoid the needless expense associated with an emergency order.

The City appreciates the Department's cooperation in this matter. If you have any questions, please do not hesitate to call me or Mike Siefert at the Vero Beach Municipal Power Plant (407/562-7231).

Sincerely,

HOPPING BOYD GREEN & SAMS

By: 
Gary V. Perko

cc: Charles Logan (DEP)
Mike Siefert (CVB)

ATTACHMENT A

TABLE 3-2. Unit #5 EMISSIONS TEST RESULTS 47% LOAD GAS FUEL
01/12/94

PARAMETER	UNITS	RUN 1	RUN 2	RUN 3	AVERAGE
Load	MW	16.4	16.3	16.4	16.4
Fuel Rate	#/sec	3.67	3.68	3.66	3.67
Barometric Pressure	in. Hg	29.93	29.93	29.93	29.93
Specific Humidity	lb H2O/lb DA	0.01530	0.01530	0.01430	0.01497
Ambient Temp.	degrees F	70.7	72.5	72.3	71.8
Oxygen	% Volume	15.3	15.3	15.3	15.3
NOx	ppmV	10.6	10.3	10.3	10.4
	ppmV @15%O2	11.1	10.8	10.8	10.9
	ppmV @15%O2 & ISO conditions	13.2	12.8	12.6	12.9

Note: all concentrations expressed as ppmV or %V are on a dry basis.

TABLE 3-3. Unit #5 EMISSIONS TEST RESULTS 60% LOAD GAS FUEL
01/12/94

PARAMETER	UNITS	RUN 1	RUN 2	RUN 3	AVERAGE
Load	MW	21.6	21.8	21.8	21.7
Fuel Rate	#/sec	4.27	4.30	4.31	4.29
Barometric Pressure	in. Hg	29.93	29.92	29.91	29.92
Specific Humidity	lb H ₂ O/lb DA	0.01430	0.01440	0.01536	0.01469
Ambient Temp.	degrees F	72.3	71.2	71.6	71.7
Oxygen	% Volume	14.9	14.9	14.9	14.9
NO _x	ppmV	15.2	15.1	15.1	15.1
	ppmV @15%O ₂	15.0	14.9	14.8	14.9
	ppmV @15%O ₂ & ISO conditions	17.3	17.2	17.4	17.3

Note: all concentrations expressed as ppmV or %V are on a dry basis.

TABLE 3-4. Unit #5 EMISSIONS TEST RESULTS 75% LOAD GAS FUEL
01/12/94

PARAMETER	UNITS	RUN 1	RUN 2	RUN 3	AVERAGE
Load	MW	27.2	26.8	27.1	27.0
Fuel Rate	#/sec	4.87	4.82	4.85	4.85
Barometric Pressure	in. Hg	29.91	29.91	29.91	29.91
Specific Humidity	lb H ₂ O/lb DA	0.01493	0.01493	0.01493	0.01493
Ambient Temp.	degrees F	71.2	71.2	71.2	71.2
Oxygen	% Volume	14.9	14.8	14.8	14.8
NO _x	ppmV	16.7	16.7	16.7	16.7
	ppmV @15%O ₂	16.3	16.2	16.3	16.3
	ppmV @15%O ₂ & ISO conditions	19.1	19.1	19.2	19.1

Note: all concentrations expressed as ppmV or %V are on a dry basis.

TABLE 3-5. Unit #5 EMISSIONS TEST RESULTS 100% LOAD GAS FUEL
01/12/94

PARAMETER	UNITS	RUN 1	RUN 2	RUN 3	AVERAGE
Load	MW	35.2	35.0	34.9	35.0
Fuel Rate	#/sec	5.79	5.90	5.79	5.83
Barometric Pressure	in. Hg	30.00	29.98	29.95	29.98
Specific Humidity	lb H2O/lb DA	0.01547	0.01639	0.01525	0.01570
Ambient Temp.	degrees F	70.9	72.0	72.0	71.6
Oxygen	% Volume	14.8	14.8	14.7	14.8
Carbon Monoxide	ppmv	6.3	6.3	6.4	6.3
	lb/MMBtu	0.0137	0.0137	0.0138	0.0137
VOCs	ppm Carbon	0.8	0.8	0.6	0.7
	lb/MMBtu	0.0010	0.0010	0.0008	0.0009
NOx	ppmV	17.5	17.3	17.5	17.4
	ppmV @15%O2	16.9	16.6	16.7	16.7
	ppmV @15%O2 & ISO conditions	19.9	19.8	19.5	19.7

Note: all concentrations expressed as ppmV or %V are on a dry basis.

TABLE 3-6. Unit #5 EMISSIONS TEST RESULTS 47% LOAD LIQUID FUEL
01/10/94

PARAMETER	UNITS	RUN 1	RUN 2	RUN 3	AVERAGE
Load	MW	17.0	17.2	17.0	17.1
Fuel Rate	#/sec	4.01	4.03	4.01	4.02
Water Rate	#/sec	3.38	3.44	3.47	3.43
Water/Fuel	Ratio	0.843	0.854	0.865	0.854
Barometric Pressure	in. Hg	30.31	30.30	30.30	30.30
Specific Humidity	lb H ₂ O/lb DA	0.01148	0.01132	0.01120	0.01133
Ambient Temp.	degrees F	70.9	71.6	70.1	70.9
Oxygen	% Volume	16.2	16.2	16.2	16.2
NO _x	ppmV	18.9	18.8	18.2	18.6
	ppmV @15%O ₂	23.8	23.6	23.0	23.5
	ppmV @15%O ₂ & ISO conditions	25.9	25.9	24.9	25.6

Note: all concentrations expressed as ppmV or %V are on a dry basis.

TABLE 3-7. Unit #5 EMISSIONS TEST RESULTS 60% LOAD LIQUID FUEL
01/10/94

PARAMETER	UNITS	RUN 1	RUN 2	RUN 3	AVERAGE
Load	MW	21.9	21.8	21.8	21.8
Fuel Rate	#/sec	4.70	4.67	4.68	4.68
Water Rate	#/sec	4.03	4.00	3.99	4.01
Water/Fuel	Ratio	0.857	0.857	0.853	0.856
Barometric Pressure	in. Hg	30.32	30.32	30.32	30.32
Specific Humidity	lb H ₂ O/lb DA	0.01094	0.01127	0.01127	0.01116
Ambient Temp.	degrees F	71.2	70.9	70.9	71.0
Oxygen	% Volume	15.4	15.4	15.4	15.4
NO _x	ppmV	25.5	25.3	25.3	25.4
	ppmV @15%O ₂	27.5	27.3	27.3	27.4
	ppmV @15%O ₂ & ISO conditions	29.2	29.2	29.2	29.2

Note: all concentrations expressed as ppmV or %V are on a dry basis.

TABLE 3-8. Unit #5 EMISSIONS TEST RESULTS 75% LOAD LIQUID FUEL
01/10/94

PARAMETER	UNITS	RUN 1	RUN 2	RUN 3	AVERAGE
Load	MW	27.6	27.6	27.6	27.6
Fuel Rate	#/sec	5.49	5.50	5.50	5.50
Water Rate	#/sec	4.73	4.71	4.74	4.73
Water/Fuel	Ratio	0.862	0.856	0.862	0.860
Barometric Pressure	in. Hg	30.31	30.32	30.32	30.32
Specific Humidity	lb H ₂ O/lb DA	0.01158	0.01126	0.01158	0.01147
Ambient Temp.	degrees F	68.4	66.6	68.4	67.8
Oxygen	% Volume	14.6	14.5	14.5	14.5
NOx	ppmV	36.7	37.1	37.9	37.2
	ppmV @15%O ₂	34.5	34.4	34.8	34.6
	ppmV @15%O ₂ & ISO conditions	37.6	37.5	37.9	37.7

Note: all concentrations expressed as ppmV or %V are on a dry basis.

TABLE 3-9. Unit #5 EMISSIONS TEST RESULTS 100% LOAD LIQUID FUEL
01/11/94

PARAMETER	UNITS	RUN 1	RUN 2	RUN 3	AVERAGE
Load	MW	36.8	36.5	36.6	36.6
Fuel Rate	#/sec	6.83	6.77	6.78	6.79
Water Rate	#/sec	6.03	6.05	6.02	6.03
Water/Fuel	Ratio	0.883	0.894	0.888	0.888
Barometric Pressure	in. Hg	30.31	30.32	30.30	30.31
Specific Humidity	lb H2O/lb DA	0.01227	0.01280	0.01275	0.01261
Ambient Temp.	degrees F	68.0	70.5	72.0	70.2
Oxygen	% Volume	14.4	14.3	14.3	14.3
Carbon Monoxide	ppmV	0.0	0.0	0.0	0.0
	lb/MMBtu	0.0	0.0	0.0	0.0
VOCs	ppm Carbon	0.0	0.0	0.0	0.0
	lb/MMBtu	0.0000	0.0000	0.0000	0.0000
NOx	ppmV	42.3	42.1	42.0	42.1
	ppmV @15%O2	38.3	37.8	37.5	37.9
	ppmV @15%O2 & ISO conditions	42.3	41.9	41.3	41.8

Note: all concentrations expressed as ppmV or %V are on a dry basis.

Table 3-10. Summary of Particulate Matter Test Results - Vero Beach Unit #5.

01/11/94

Run	Flow Rate (dscfm)	Stack Temp. (°F)	H ₂ O (%)	O ₂ (%)	Particulate Matter Emissions			
					Concentration (gr/dscf)	Actual Emission Rate (lb/MMBtu)	Allowable Emission Rate (lb/MMBtu)	
1	263,605	407	7.82	14.5	0.00043	0.00184	0.025	
2	261,787	406	7.89	14.5	0.00131	0.00562	0.025	
3	268,367	406	7.59	14.4	0.00088	0.00375	0.025	
Avg	264,586	406	7.77	14.4	0.00087	0.00374	0.025	
Average Opacity:							0%	

Source: ESE, 1993

TABLE 3-1. TURBINE EXHAUST PRELIMINARY OXYGEN TRAVERSE

POINT NO.	PORT NUMBER			
	N	S	E	W
1	15.6	15.6	15.7	15.6
2	15.6	15.6	15.7	15.6
3	15.6	15.6	15.7	15.6
4	15.6	15.6	15.7	15.6
5	15.6	15.6	15.7	15.6
6	15.6	15.6	15.7	15.6
7	15.6	15.6	15.7	15.6
8	15.6	15.6	15.7	15.6
9	15.6	15.6	15.7	15.6
10	15.6	15.6	15.7	15.6
11	15.6	15.6	15.7	15.6
12	15.6	15.6	15.7	15.6

All values are O₂ concentrations expressed in percent volume, dry basis

Test run average: 15.6 %V O₂

Load average: 17.2 MWatts

ATTACHMENT B

Unit #1

AOR

1989-1993

RECEIVED

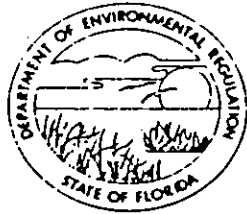
SEP 1994

Hopping Boyd Green & Sons

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER
DISTRICT

3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

ALEX. SENKEVICH
DISTRICT MANAGER

ANNUAL OPERATION REPORT FORM FOR AIR EMISSIONS SOURCES

For each permitted emission point, please submit a separate report for calendar year 1989 prior to March 1st of the following year.

I GENERAL INFORMATION

1. Source Name: Vero Beach Municipal Power Plant
2. Permit Number: A031-112349
3. Source Address: 100 - 17th Street
Vero Beach, Florida 32961-1389
4. Description of Source: Fossil Fuel Steam Generator Unit #1
under 250 MM BTU/hr Stack Test-Visible Emissions only

II ACTUAL OPERATING HOURS: 24.0 hrs/day 3.9 days/wk 1.0 wks/yr

III RAW MATERIAL INPUT PROCESS WEIGHT: (List separately all materials put into process and specify applicable units if other than tons/yr)

Raw Material	Input Process Weight
N/A	tons/yr
_____	tons/yr
_____	tons/yr
_____	tons/yr
_____	tons/yr
_____	tons/yr

IV PRODUCT OUTPUT (Specify applicable units)

N/A

TOTAL FUEL USAGE including standby fuels. If fuel is oil, specify type and sulfur content (e.g., No. 6 oil with 1% S).

2.48 10⁶ cubic feet Natural Gas _____ 10³ Kerosene
49.51 10³ gallons #6 Oil, 2.0 %S _____ tons Coal
_____ 10³ gallons Propane _____ tons Carbonaceous
_____ 10⁶ Black Liquor Solids _____ tons Refuse
Other (Specify type and units) _____

EMISSION RATE(S) (tons/yr)

0.58 Particulates 7.77 Sulfur Dioxide N/A Total Reduced Sulfur
2.34 Nitrogen Oxide 0.17 Carbon Monoxide N/A Fluoride
0.03 Hydrocarbon Other (Specify type and units) _____

METHOD OF CALCULATING EMISSION RATES (e.g., use of fuel and materials balance, emission factors drawn from AP 42, etc.)

U.S. E.P.A. AP-42 Tables 1.3-1 and 1.4-1 (attached)

CERTIFICATION:

I hereby certify that the information given in this report is correct to the best of my knowledge.

George W. Williams
SIGNATURE OF OWNER OR
AUTHORIZED REPRESENTATIVE
July 13, 1990
DATE

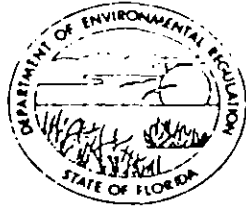
TYPED NAME AND TITLE

Unit #1

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER
DISTRICT

3319 MACUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

ALEX SENKEVICH
DISTRICT MANAGER

ANNUAL OPERATION REPORT FORM FOR AIR EMISSIONS SOURCES

For each permitted emission point, please submit a separate report for calendar year 1990 prior to March 1st of the following year.

I GENERAL INFORMATION

1. Source Name: Vero Beach Municipal Power Plant
2. Permit Number: A031-184320
3. Source Address: 100 - 17th Street
Vero Beach, Florida 32961-1389
4. Description of Source: Fossil Fuel Steam Generator Unit #1
under 250 MM BTU/hr Stack Test-Visible Emissions only

II ACTUAL OPERATING HOURS: 24 hrs/day 7 days/wk 7.23 wks/yr

III RAW MATERIAL INPUT PROCESS WEIGHT: (List separately all materials put into process and specify applicable units if other than tons/yr)

Raw Material	Input Process Weight
_____	_____ tons/yr
_____	_____ tons/yr
_____	_____ tons/yr
_____	_____ tons/yr
_____	_____ tons/yr

IV PRODUCT OUTPUT (Specify applicable units)

V TOTAL FUEL USAGE including standby fuels. If fuel is oil, specify type and sulfur content (e.g., No. 6 oil with 1% S).

129.5 10⁶ cubic feet Natural Gas _____ 10³ Kerosene
-0- 10³ gallons _____ Oil, _____ %S _____ tons Coal
_____ 10³ gallons Propane _____ tons Carbonaceous
_____ 10⁶ Black Liquor Solids _____ tons Refuse
Other (Specify type and units) _____

VI EMISSION RATE(S) (tons/yr)

0.32 Particulates 0.04 Sulfur Dioxide N/A Total Reduced Sulfur
35.61 Nitrogen Oxide 2.59 Carbon Monoxide N/A Fluoride
0.11 Hydrocarbon Other (Specify type and units) _____

VII METHOD OF CALCULATING EMISSION RATES (e.g., use of fuel and materials balance, emission factors drawn from AP 42, etc.)

U.S. E.P.A. AP-42 Tables 1.3-1 and 1.4-1 (attached)

VIII CERTIFICATION:

I hereby certify that the information given in this report is correct to the best of my knowledge.

Shuler W. Massey
SIGNATURE OF OWNER OR
AUTHORIZED REPRESENTATIVE

Shuler W. Massey
Director of Power Resources
TYPED NAME AND TITLE

5-10-91
DATE

Unit #1

TOTAL FUEL USAGE including standby fuels. If fuel is oil, specify type and sulfur content (e.g., No. 6 oil with 1% S).

16.48 10⁶ cubic feet Natural Gas _____ 10³ Kerosene
0 10³ gallons _____ Oil, _____ %S _____ tons Coal
_____ 10³ gallons Propane _____ tons Carbonaceous
_____ 10⁶ Black Liquor Solids _____ tons Refuse

Other (Specify type and units) _____

I EMISSION RATE(S) (tons/yr)

.04 Particulates .005 Sulfur Dioxide _____ Total Reduced Sulfur
4.53 Nitrogen Oxide .33 Carbon Monoxide _____ Fluoride
.014 Hydrocarbon Other (Specify type and units) _____

II METHOD OF CALCULATING EMISSION RATES (e.g., use of fuel and materials balance, emission factors drawn from AP 42, etc.)

U. S. E.P.A. AP-42 Tables 1.3-1 and 1.4-1

III CERTIFICATION:

I hereby certify that the information given in this report is correct to the best of my knowledge.

Shuler W. Massey
SIGNATURE OF OWNER OR
AUTHORIZED REPRESENTATIVE

1/23/92
DATE

Shuler W. Massey, Director of Power Resources
TYPED NAME AND TITLE

APIS ID	District 3 0	Office O R L	County 3 1	Facility 0 0 2 9	Source 0 1	INPUT	
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--

SOURCE OPERATION REPORT - PAGE 1 & 2 (SOURCE REPORT 1 OF 5)
 FACILITY NAME: City of Vero Beach Municipal Power Plant

SOURCE INFORMATION (AIR030)

1. Source Description Unit 1 : Fuel oil/Natural gas fired steam generator which operates a 12.5 MW turbine/generator		
2. DER Permit or PPS Number A031-184320	3. Source APIS ID 30 ORL 31 0029 01	4. Source Status A
5. Source Startup Date (MM/DD/YY)		6. Source Shutdown Date (MM/DD/YY)

SOURCE EMISSION POINT/CONTROL INFORMATION (AIR033)

1. Source Emission Point Type 2
2a. Description of Control Equipment 'a'
2b. Description of Control Equipment 'b'

SOURCE OPERATING SCHEDULE INFORMATION (AJR050)

1. Operated During Year?	2. Average Operation During Year	hour/day	day/week	3. Total Operation During Year (hour/year)	
Y		16.3	2.83	276.7	
4. Percent Hours of Operation by Season		DJF	MAM	JJA	SON
100%		24%	0	56%	20%

Shaded areas are for DER use.

APIS ID	District 3 0	Office O R L	County 3 1	Facility 0 0 2 9	Source 0 1	INPUT	
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--

SOURCE PROCESS/FUEL INFORMATION (AIR050)

1a. SCC 'a'	2a. Description of Process or Type of Fuel Natural Gas	
3a. Annual Process or Fuel Usage Rate (SCC Units) 19.745		
4a. Fuel Average % Sulfur	5a. Fuel Average % Ash	6a. Fuel Heat Content (mmBtu/SCC Units) 1028

1b. SCC 'b'	2b. Description of Process or Type of Fuel	
3b. Annual Process or Fuel Usage Rate (SCC Units)		
4b. Fuel Average % Sulfur	5b. Fuel Average % Ash	6b. Fuel Heat Content (mmBtu/SCC Units)

1c. SCC 'c'	2c. Description of Process or Type of Fuel	
3c. Annual Process or Fuel Usage Rate (SCC Units)		
4c. Fuel Average % Sulfur	5c. Fuel Average % Ash	6c. Fuel Heat Content (mmBtu/SCC Units)

1d. SCC 'd'	2d. Description of Process or Type of Fuel	
3d. Annual Process or Fuel Usage Rate (SCC Units)		
4d. Fuel Average % Sulfur	5d. Fuel Average % Ash	6d. Fuel Heat Content (mmBtu/SCC Units)

Shaded areas are for DER use.

APIS ID	District 3 0	Office O R L	County 3 1	Facility 0 0 2 9	Source 0 1	INPUT	
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--

SOURCE OPERATION REPORT - PAGE 3 & 4 (SOURCE REPORT 1 OF 5)
 SOURCE DESCRIPTION: Unit 1 Steam Generator

SOURCE EMISSIONS INFORMATION (AIR051)

1a. Pollutant 'a' ID CO	2a. Annual Emissions (ton/year) 0.395	3a. Emissions Method Code 3
----------------------------	--	--------------------------------

4a. Emissions Calculation
 $40 \text{ lb/mmcf} * 19.745 \text{ mmcf}/2000 \text{ lb/ton} = 0.395 \text{ tons}$

1b. Pollutant 'b' ID VOC (TOC)	2b. Annual Emissions (ton/year) 0.0168	3b. Emissions Method Code 3
-----------------------------------	---	--------------------------------

4b. Emissions Calculation
 $1.7 \text{ lb/mmcf} * 19.745 \text{ mmcf}/2000 \text{ lb/ton} = 0.0168 \text{ tons}$

1c. Pollutant 'c' ID PM	2c. Annual Emissions (ton/year) 0.0099	3c. Emissions Method Code 3
----------------------------	---	--------------------------------

4c. Emissions Calculation
 $1 \text{ lb/mmcf} * 19.745 \text{ mmcf}/2000 \text{ lb/ton} = 0.0099 \text{ tons}$

1d. Pollutant 'd' ID PM10	2d. Annual Emissions (ton/year) 0.0784	3d. Emissions Method Code 4
------------------------------	---	--------------------------------

4d. Emissions Calculation
 $0.4 * .0193 \text{ lb/mmbtu} * 19.745 \text{ mmcf} * 1028 \text{ mmbtu/mmcf}/2000 \text{ lb/ton} = 0.0784 \text{ tons}$

Shaded areas are for DER use.

APIS ID	District 3 0	Office O R L	County 3 1	Facility 0 0 2 9	Source 0 1	INPUT	
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--

SOURCE EMISSIONS INFORMATION (Continued)

1e. Pollutant 'e' ID NOx	2e. Annual Emissions (ton/year) 5.43	3e. Emissions Method Code 3
4e. Emissions Calculation 550 lb/mmcf *19.745 mmcf/2000 lb/ton = 5.43 tons		

1f. Pollutant 'f' ID SO2	2f. Annual Emissions (ton/year) 0.006	3f. Emissions Method Code 3
4f. Emissions Calculation 0.6 lb/mmcf *19.745 mmcf/2000 lb/ton = 0.006 tons		

1g. Pollutant 'g' ID Pb	2g. Annual Emissions (ton/year) 0.00059	3g. Emissions Method Code 4
4g. Emissions Calculation $5.8 * 10^{-5} \text{ lb/mmBtu} * 19.745 \text{ mmcf} * 1028 \text{ mmBtu/mmcf} / 2000 \text{ lb/ton} = 0.00059 \text{ tons}$		

1b. Pollutant 'h' ID	2h. Annual Emissions (ton/year)	3h. Emissions Method Code
4h. Emissions Calculation		

5. Source Operation Report Comments

Shaded areas are for DER use.

APIS ID	District 3 0	Office O R L	County 3 1	Facility 0 0 2 9	Source 0 1	INPUT	
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--

SOURCE OZONE-SIP REPORT - PAGE 5 & 6 (SOURCE REPORT 1 OF 5)
 SOURCE DESCRIPTION: Unit 1 Steam Generator

SOURCE OZONE-SIP PROCESS/FUEL INFORMATION (AIR052)

1. Existing 12/31/90? Y	2. Average Operation for Ozone Season (June thru August)	hour/day 15.56	day/week 2.5
----------------------------	--	-------------------	-----------------

3a. SCC 'a'	4a. Description of Process or Type of Fuel Natural Gas		
5a. Daily Ozone Season Process or Fuel Usage Rate (SCC Units) 1.249			
6a. Emission Factor (lb/SCC Unit)	VOC 1.7	NOx 550	
7a. Comments			

3b. SCC 'b'	4b. Description of Process or Type of Fuel		
5b. Daily Ozone Season Process or Fuel Usage Rate (SCC Units)			
6b. Emission Factor (lb/SCC Unit)	VOC	NOx	
7b. Comments			

Shaded areas are for DER use.

APIS ID	District 3 0	Office 0 R L	County 3 1	Facility 0 0 2 9	Source 0 1	INPUT	
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--

SOURCE OZONE SIP EMISSIONS INFORMATION (AIR053)

1a. Pollutant ID VOC	2a. Ozone Season Emissions (lb/day) 2.12	3a. Emissions Method Code 3
4a. Emissions Calculation 1.7 lb/mmcf * 1.249 mmcf/day = 2.12 lb/day		

1b. Pollutant ID NOx	2b. Ozone Season Emissions (lb/day) 686.95	3b. Emissions Method Code 3
4b. Emissions Calculation 550 lb/mmcf * 1.249 mmcf/day = 686.95 lb/day		

Shaded areas are for DER use.

Florida Department of Environmental Protection

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

DEP Form	17-210.900(4)
Form Title	Annual Operating Report
Effective Date	February 9, 1993
DEP Application No.	
(Filled in by DEP)	

DIVISION OF AIR RESOURCES MANAGEMENT

ANNUAL OPERATING REPORT FOR AIR POLLUTANT EMITTING FACILITY

See Instructions for Form 17-210.900(4)

(Note: Shaded fields on form are for DEP use; please leave blank)

REPORT INFORMATION

1. Year of Report 93	2. Date Report Received	3. Number of Sources in Report 5
-------------------------	-------------------------	-------------------------------------

FACILITY INFORMATION (AIR020)

1. Facility APIS ID 30ORL310029	2. Facility Status A	3. Date of Permanent Facility Shutdown
4. Facility Owner/Company Name VERO BEACH POWER PLANT CITY OF VERO BEACH		
5. Facility Name/Street Address or Location Description MUNICIPAL POWER PLANT 100 17TH ST		
6. Facility City VERO BEACH	County 31	
7. Facility Compliance Tracking Codes	CDS 1	VOC 4
8. Facility Comment (60 Characters)		

FACILITY HISTORY INFORMATION (AIR022)

1. Change in Facility Name During Year? N	Previous Name	1. Date of Change
--	---------------	-------------------

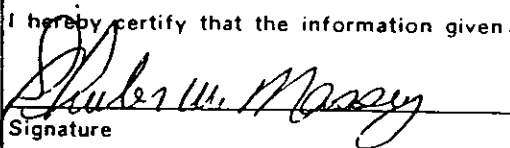
Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	
APIS ID	30	ORL	31	0029
				INPUT <input type="checkbox"/>

OWNER/CONTACT INFORMATION (AIR021)

1. Individual Owner or Authorized Representative Name			
MR. SHULER W. MASSEY			
Organization/Firm			
VERO BEACH POWER PLANT CITY OF VERO BEACH POWER PLANT			
Street Address or P.O. Box			
P O BOX 1389			
City	State	Zip	
VERO BEACH	FL	32961-1389	
Telephone			
(407) 567-5154 562-7231			
2. Facility Contact for Air Regulatory Matters Name			
MICHAEL SIEFERT			
Organization/Firm			
CITY OF VERO BEACH			
Street Address or P.O. Box			
P. O. BOX 1389			
City	State	Zip	
VERO BEACH	FL	32961-1389	
Telephone			
(407) 562-7231			

CERTIFICATION

Statement by Owner or Authorized Representative	
I hereby certify that the information given in this report is correct to the best of my knowledge.	
Signature	Date
	2/16/94

Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE	
APIS ID	30	ORL	31	0029	01
					INPLT <input type="checkbox"/>

SOURCE OPERATION REPORT - PAGE 1 & 2 (SOURCE REPORT 1 OF 5)
 FACILITY NAME: VERO BEACH POWER PLANT

SOURCE INFORMATION (AIR030)

1. Source Description		
FOSSIL FUEL STEAM GENERATOR UNIT #1		
2. DEP Permit or PPS Number	3. Source APIS ID	4. Source Status
A031184320	30ORL31002901	A
5. Source Startup Date (MM/DD/YY)		6. Source Shutdown Date (DD/MM/YY)

SOURCE EMISSION POINT/CONTROL INFORMATION (AIR033)

1. Source Emission Point Type
2
2a. Description of Control Equipment 'a'
2b. Description of Control Equipment 'b'

SOURCE OPERATING SCHEDULE INFORMATION (AIR050)

1. Operated During Year?	2. Average Operation During Year	hour/day	day/week	3. Total Operation During Year (hour/year)	
Y		8.81	1.33	35.25	
4. Percent Hours of Operation by Season		DJF	MAM	JJA	SON
		0%	55%	0%	45%

Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE	INPUT
APIS ID	30	ORL	31	0029	01

SOURCE PROCESS/FUEL INFORMATION (AIR050)

1a. SCC 'a'	2a. Description of Process or Type of Fuel	
10100801	EXTCOMB BOILER ELECTRIC GENERATN NATURAL GAS 100MMBTU/HR EXTF	
3a. Annual Process or Fuel Usage Rate (SCC Units)		
1.458 MILLION CUBIC FEET BURNED		
4a. Fuel Average % Sulphur	5a. Fuel Average % Ash	6a. Fuel Heat Content (mmBtu/SCC Units)
		1028

1b. SCC 'b'	2b. Description of Process or Type of Fuel	
10100401	EXTCOMB BOILER ELECTRIC GENERATN RESIDUAL OIL NO 6 OIL NORM FRG	
3b. Annual Process or Fuel Usage Rate (SCC Units)		
0 1000 GALLONS BURNED		
4b. Fuel Average % Sulphur	5b. Fuel Average % Ash	6b. Fuel Heat Content (mmBtu/SCC Units)

1c. SCC 'c'	2c. Description of Process or Type of Fuel	
3c. Annual Process or Fuel Usage Rate (SCC Units)		
4c. Fuel Average % Sulphur	5c. Fuel Average % Ash	6c. Fuel Heat Content (mmBtu/SCC Units)

1d. SCC 'd'	2d. Description of Process or Type of Fuel	
3d. Annual Process or Fuel Usage Rate (SCC Units)		
4d. Fuel Average % Sulphur	5d. Fuel Average % Ash	6d. Fuel Heat Content (mmBtu/SCC Units)

Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE	
APIS ID	30	ORL	31	0029	01
					INPLT

SOURCE OPERATION REPORT - PAGE 3 & 4 (SOURCE REPORT 1 OF 5)
 SOURCE DESCRIPTION: FOSSIL FUEL STEAM GENERATOR UNIT #1

SOURCE EMISSIONS INFORMATION (AIR051)

1a. Pollutant 'a' ID VOLATILE ORGANIC COMPOUNDS	2a. Annual Emissions (ton/year) 0.0012	3a. Emissions Method Code 3
4a. Emissions Calculation (1.7 Lb/mmcf * 1.458 mmcf) / 2000 = 0.0012 Tons		

1b. Pollutant 'b' ID SULFUR DIOXIDE	2b. Annual Emissions (ton/year) 0.0004	3b. Emissions Method Code 3
4b. Emissions Calculation (0.6 Lb/mmcf * 1.458 mmcf) / 2000 = 0.0004 Tons		

1c. Pollutant 'c' ID PARTICULATE MATTER - TOTAL	2c. Annual Emissions (ton/year) 0.0007	3c. Emissions Method Code 3
4c. Emissions Calculation (1.0 Lb/mmcf * 1.458 mmcf) / 2000 = 0.0007 Tons		

1d. Pollutant 'd' ID NITROGEN OXIDES	2d. Annual Emissions (ton/year) 0.4	3d. Emissions Method Code 3
4d. Emissions Calculation (550 Lb/mmcf * 1.458 mmcf / 2000 = 0.4 Tons		

Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE	INPUT
APIS ID 30	ORL	31	0029	01	<input type="checkbox"/>

SOURCE EMISSIONS INFORMATION (Continued)

1e. Pollutant 'e' ID CARBON MONOXIDE	2e. Annual Emissions (ton/year) 0.029	3e. Emissions Method Code 3
4e. Emissions Calculation (40 Lb/mmcf * 1.458 mmcf) / 2000 = 0.029 Tons		

1f. Pollutant 'f' ID PARTICULATE MATTER - 10 MICRONS OR LESS	2f. Annual Emissions (ton/year) 0.0007	3f. Emissions Method Code 4
4f. Emissions Calculation (1.0 Lb/mmcf * 1.458 mmcf) / 2000 = 0.0007 Tons		

1g. Pollutant 'g' ID LEAD AND LEAD COMPOUNDS	2g. Annual Emissions (ton/year) 0.00004	3g. Emissions Method Code 4
4g. Emissions Calculation -5 (5.8 * 10 Lb/mmbtu * 1.458 mmcf * 1028 $\frac{\text{mmbtu}}{\text{mmcf}}$) / 2000 = 0.00004 Tons		

1h. Pollutant 'h' ID	2h. Annual Emissions (ton/year)	3h. Emissions Method Code
4h. Emissions Calculation		
5. Source Operation Report Comments		

Shaded areas are for DEP use.

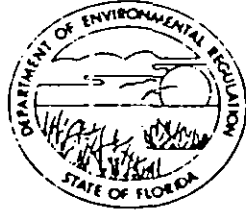
Unit #2

AOR

1989-1993

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER
DISTRICT
3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY
ALEX. SENKEVICH
DISTRICT MANAGER

ANNUAL OPERATION REPORT FORM FOR AIR EMISSIONS SOURCES

For each permitted emission point, please submit a separate report for calendar year 19 89
prior to March 1st of the following year.

I GENERAL INFORMATION

- 1. Source Name: Vero Beach Municipal Power Plant
- 2. Permit Number: A031-146711
- 3. Source Address: 100 - 17th Street
Vero Beach, Florida 32961-1389
- 4. Description of Source: Fossil Fuel Steam Generator Unit #2 under
250 MM BTU/hr Stack Test - Visible Emissions Only

II ACTUAL OPERATING HOURS: 24.0 hrs/day 7.0 days/wk 4.36 wks/yr

III RAW MATERIAL INPUT PROCESS WEIGHT: (List separately all materials put into process
and specify applicable units if other than tons/yr)

Raw Material	Input Process Weight
<u>N/A</u>	_____ tons/yr
_____	_____ tons/yr
_____	_____ tons/yr
_____	_____ tons/yr
_____	_____ tons/yr

IV PRODUCT OUTPUT (Specify applicable units)

N/A

TOTAL FUEL USAGE including standby fuels. If fuel is oil, specify type and sulfur content (e.g., No. 6 oil with 1% S).

60.0 10⁶ cubic feet Natural Gas _____ 10³ Kerosene
-0- 10³ gallons _____ Oil, _____ %S _____ tons Coal
_____ 10³ gallons Propane _____ tons Carbonaceous
_____ 10⁶ Black Liquor Solids _____ tons Refuse
Other (Specify type and units) _____

I EMISSION RATE(S) (tons/yr) Gas Only

0.15 Particulates 0.02 Sulfur Dioxide N/A Total Reduced Sulfur
16.50 Nitrogen Oxide 1.20 Carbon Monoxide N/A Fluoride
0.05 Hydrocarbon Other (Specify type and units) _____

II METHOD OF CALCULATING EMISSION RATES (e.g., use of fuel and materials balance, emission factors drawn from AP 42, etc.)

U.S. E.P.A. Ap-42 Table 1.4-1 (attached)

III CERTIFICATION:

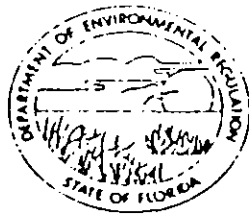
I hereby certify that the information given in this report is correct to the best of my knowledge.

George W. Williams
SIGNATURE OF OWNER OR
AUTHORIZED REPRESENTATIVE
July 13, 1990
DATE

TYPED NAME AND TITLE

Unit #2

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION



ST. JOHNS RIVER
DISTRICT

3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803

BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

ALEX. SENKEVICH
DISTRICT MANAGER

ANNUAL OPERATION REPORT FORM FOR AIR EMISSIONS SOURCES

For each permitted emission point, please submit a separate report for calendar year 1990 prior to March 1st of the following year.

I GENERAL INFORMATION

1. Source Name: Vero Beach Municipal Power Plant
2. Permit Number: A031-146711
3. Source Address: 100 - 17th Street
Vero Beach, Florida 32961-1389
4. Description of Source: Fossil Fuel Steam Generator Unit #2
under 250 MM BTU/hr Stack Test-Visible Emissions only

II ACTUAL OPERATING HOURS: 24 hrs/day 7 days/wk 10.67 wks/yr

III RAW MATERIAL INPUT PROCESS WEIGHT: (List separately all materials put into process and specify applicable units if other than tons/yr)

Raw Material	Input Process Weight
<u>N/A</u>	<u>tons/yr</u>
<u> </u>	<u>tons/yr</u>
<u> </u>	<u>tons/yr</u>
<u> </u>	<u>tons/yr</u>
<u> </u>	<u>tons/yr</u>

IV PRODUCT OUTPUT (Specify applicable units)

N/A

V TOTAL FUEL USAGE including standby fuels. If fuel is oil, specify type and sulfur content (e.g., No. 6 oil with 1% S).

166.9 10⁶ cubic feet Natural Gas _____ 10³ Kerosene
-0- 10³ gallons -0- Oil, -0- %S _____ tons Coal
_____ 10³ gallons Propane _____ tons Carbonaceous
_____ 10⁶ Black Liquor Solids _____ tons Refuse

Other (Specify type and units) _____

VI EMISSION RATE(S) (tons/yr)

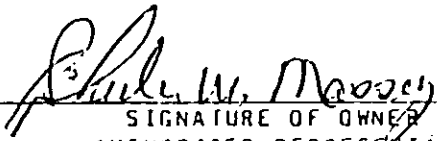
0.42 Particulates 0.05 Sulfur Dioxide N/A Total Reduced Sulfur
45.9 Nitrogen Oxide 3.34 Carbon Monoxide N/A Fluoride
0.14 Hydrocarbon Other (Specify type and units) _____

VII METHOD OF CALCULATING EMISSION RATES (e.g., use of fuel and materials balance, emission factors drawn from AP 42, etc.)

U.S. E.P.A. Ap-42 Table 1.4-1 (attached)

VIII 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

Shuler W. Massey
Director of Power Resources

TYPED NAME AND TITLE

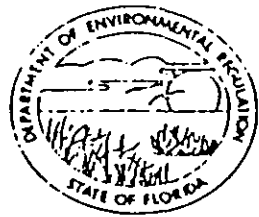
5-10-91

DATE

Unit #2

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

JOHNS RIVER
DISTRICT
19 MAGUIRE BOULEVARD
SUITE 232
LANDO, FLORIDA 32803



BOB GRAHAM
GOVERNOR
VICTORIA J. SCHIFFEL
SECRETARY
ALEX SENKEVICH
DISTRICT MANAGER

ANNUAL OPERATION REPORT FORM FOR AIR EMISSIONS SOURCES

For each permitted emission point, please submit a separate report for calendar year 19 91 prior to March 1st of the following year.

I GENERAL INFORMATION

1. Source Name: Vero Beach Municipal Power Plant
2. Permit Number: A031-146711
3. Source Address: 100 - 17th Street
Vero Beach, Florida 32961-1389
4. Description of Source: Fossil Fuel Steam Generator Unit #2
248 MMBTU/hr Natural Gas, 243 MMBTU/hr No. 6 Fuel Oil.

II ACTUAL OPERATING HOURS: 24 hrs/day 7 days/wk 9.77 wks/yr

III RAW MATERIAL INPUT PROCESS WEIGHT: (List separately all materials put into process and specify applicable units if other than tons/yr)

Raw Material	Input Process Weight
N/A	tons/yr
_____	tons/yr
_____	tons/yr
_____	tons/yr
_____	tons/yr
_____	tons/yr

IV PRODUCT OUTPUT (Specify applicable units)

N/A

TOTAL FUEL USAGE including standby fuels. If fuel is oil, specify type and sulfur content (e.g., No. 6 oil with 1% S).

141.16 10⁶ cubic feet Natural Gas _____ 10³ Kerosene
0 10³ gallons _____ Oil, _____ %S _____ tons Coal
_____ 10³ gallons Propane _____ tons Carbonaceous
_____ 10⁶ Black Liquor Solids _____ tons Refuse

Other (Specify type and units) _____

I EMISSION RATE(S) (tons/yr)

.35 _____ Particulates .04 _____ Sulfur Dioxide _____ Total Reduced Sulfur
38.82 _____ Nitrogen Oxide 2.82 _____ Carbon Monoxide _____ Fluoride
.12 _____ Hydrocarbon Other (Specify type and units) _____

II METHOD OF CALCULATING EMISSION RATES (e.g., use of fuel and materials balance, emission factors drawn from AP 42, etc.)

U.S. E.P.A. AP-42 Table 1.3-1 and 1.4-1

III CERTIFICATION:

I hereby certify that the information given in this report is correct to the best of my knowledge.

Shuler W. Massey
SIGNATURE OF OWNER OR
AUTHORIZED REPRESENTATIVE

Shuler W. Massey, Director of Power Resources
TYPED NAME AND TITLE

1/23/92
DATE

APIS ID	District 3 0	Office O R L	County 3 1	Facility 0 0 2 9	Source 0 2	INPUT	
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--

SOURCE OPERATION REPORT - PAGE 1 & 2 (SOURCE REPORT 2 OF 5)
 FACILITY NAME: City of Vero Beach Municipal Power Plant

SOURCE INFORMATION (AIR030)

1. Source Description Unit 2 : Fuel oil/Natural gas fired steam generator which operates a 16.5 MW turbine/generator		
2. DER Permit or PPS Number A031-146711	3. Source APIS ID 30 ORL 31 0029 02	4. Source Status A
5. Source Startup Date (MM/DD/YY)		6. Source Shutdown Date (MM/DD/YY)

SOURCE EMISSION POINT/CONTROL INFORMATION (AIR033)

1. Source Emission Point Type 2
2a. Description of Control Equipment 'a'
2b. Description of Control Equipment 'b'

SOURCE OPERATING SCHEDULE INFORMATION (AIR050)

1. Operated During Year?	2. Average Operation During Year	hour/day	day/week	3. Total Operation During Year (hour/year)	
Y		20.5	4.75	389.6	
4. Percent Hours of Operation by Season		DJF	MAM	JJA	SON
100%		100%	0	0	0

Shaded areas are for DER use.

APIS ID	District 3 0	Office 0 R L	County 3 1	Facility 0 0 2 9	Source 0 2	INPUT		
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--	--

SOURCE PROCESS/FUEL INFORMATION (AIR050)

1a. SCC 'a'		2a. Description of Process or Type of Fuel Natural Gas	
3a. Annual Process or Fuel Usage Rate (SCC Units) 37.836			
4a. Fuel Average % Sulfur	5a. Fuel Average % Ash	6a. Fuel Heat Content (mmBtu/SCC Units) 1028	

1b. SCC 'b'		2b. Description of Process or Type of Fuel	
3b. Annual Process or Fuel Usage Rate (SCC Units)			
4b. Fuel Average % Sulfur	5b. Fuel Average % Ash	6b. Fuel Heat Content (mmBtu/SCC Units)	

1c. SCC 'c'		2c. Description of Process or Type of Fuel	
3c. Annual Process or Fuel Usage Rate (SCC Units)			
4c. Fuel Average % Sulfur	5c. Fuel Average % Ash	6c. Fuel Heat Content (mmBtu/SCC Units)	

1d. SCC 'd'		2d. Description of Process or Type of Fuel	
3d. Annual Process or Fuel Usage Rate (SCC Units)			
4d. Fuel Average % Sulfur	5d. Fuel Average % Ash	6d. Fuel Heat Content (mmBtu/SCC Units)	

Shaded areas are for DER use.

APIS ID	District 3 0	Office O R L	County 3 1	Facility 0 0 2 9	Source 0 2	INPUT	
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--

SOURCE OPERATION REPORT - PAGE 3 & 4 (SOURCE REPORT 2 OF 5)

SOURCE DESCRIPTION: Unit 2 Steam Generator

SOURCE EMISSIONS INFORMATION (AIR051)

1a. Pollutant 'a' ID CO	2a. Annual Emissions (ton/year) 0.757	3a. Emissions Method Code 3
4a. Emissions Calculation $40 \text{ lb/mmcf} * 37.836 \text{ mmcf}/2000 \text{ lb/ton} = 0.757 \text{ tons}$		

1b. Pollutant 'b' ID VOC (TOC)	2b. Annual Emissions (ton/year) 0.032	3b. Emissions Method Code 3
4b. Emissions Calculation $1.7 \text{ lb/mmcf} * 37.836 \text{ mmcf}/2000 \text{ lb/ton} = 0.032 \text{ tons}$		

1c. Pollutant 'c' ID PM	2c. Annual Emissions (ton/year) 0.0189	3c. Emissions Method Code 3
4c. Emissions Calculation $1 \text{ lb/mmcf} * 37.836 \text{ mmcf}/2000 \text{ lb/ton} = 0.0189 \text{ tons}$		

1d. Pollutant 'd' ID PM10	2d. Annual Emissions (ton/year) 0.15	3d. Emissions Method Code 4
4d. Emissions Calculation $0.4 * .0193 \text{ lb/mmbtu} * 37.836 \text{ mmcf} * 1028 \text{ mmbtu/mmcf}/2000 \text{ lb/ton} = 0.15 \text{ tons}$		

Shaded areas are for DER use.

APIS ID	District 3 0	Office O R L	County 3 1	Facility 0 0 2 9	Source 0 2	INPUT		
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--	--

SOURCE EMISSIONS INFORMATION (Continued)

1e. Pollutant 'e' ID NOx	2e. Annual Emissions (ton/year) 10.4	3e. Emissions Method Code 3
-----------------------------	---	--------------------------------

4e. Emissions Calculation
 $550 \text{ lb/mmcf} * 37.836 \text{ mmcf}/2000 \text{ lb/ton} = 10.4 \text{ tons}$

1f. Pollutant 'f' ID SO2	2f. Annual Emissions (ton/year) 0.011	3f. Emissions Method Code 3
-----------------------------	--	--------------------------------

4f. Emissions Calculation
 $0.6 \text{ lb/mmcf} * 37.836 \text{ mmcf}/2000 \text{ lb/ton} = 0.011 \text{ tons}$

1g. Pollutant 'g' ID Pb	2g. Annual Emissions (ton/year) 0.0011 ton	3g. Emissions Method Code 4
----------------------------	---	--------------------------------

4g. Emissions Calculation
 $5.8 * 10^{-5} \text{ lb/mmcf} * 37.836 \text{ mmcf} * 1028 \text{ mmcf}/2000 \text{ lb/ton} = 0.0011 \text{ tons}$

1h. Pollutant 'h' ID	2h. Annual Emissions (ton/year)	3h. Emissions Method Code
----------------------	---------------------------------	---------------------------

4h. Emissions Calculation

5. Source Operation Report Comments

Shaded areas are for DER use.

APIS ID	District 3 0	Office O R L	County 3 1	Facility 0 0 2 9	Source 0 2	INPUT	
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--

SOURCE OZONE-SIP REPORT - PAGE 5 & 6 (SOURCE REPORT 2 OF 5)

SOURCE DESCRIPTION: Unit 2 Steam Generator

SOURCE OZONE-SIP PROCESS/FUEL INFORMATION (AIR052)

1. Existing 12/31/90? Y	2. Average Operation for Ozone Season (June thru August)	hour/day 0	day/week 0
----------------------------	--	---------------	---------------

3a. SCC 'a'	4a. Description of Process or Type of Fuel
-------------	--

5a. Daily Ozone Season Process or Fuel Usage Rate (SCC Units) 0
--

6a. Emission Factor (lb/SCC Unit)	VOC 1.7	NOx 550
--------------------------------------	------------	------------

7a. Comments
Unit 2 turbine/generator will be repowered by gas turbine exhaust/heat recovery steam generator. (HRSG). Unit 2 boiler will see limited use in future.

3b. SCC 'b'	4b. Description of Process or Type of Fuel
-------------	--

5b. Daily Ozone Season Process or Fuel Usage Rate (SCC Units)

6b. Emission Factor (lb/SCC Unit)	VOC	NOx
--------------------------------------	-----	-----

7b. Comments

Shaded areas are for DER use.

APIS ID	District 3 0	Office O R L	County 3 1	Facility 0 0 2 9	Source 0 2	INPUT		
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--	--

SOURCE OZONE SIP EMISSIONS INFORMATION (AIR053)

1a. Pollutant ID VOC	2a. Ozone Season Emissions (lb/day) 0	3a. Emissions Method Code
4a. Emissions Calculation		

1b. Pollutant ID NOx	2b. Ozone Season Emissions (lb/day) 0	3b. Emissions Method Code 3
4b. Emissions Calculation		

Shaded areas are for DER use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE	
APIS ID	30	ORL	31	0029	02
					INPUT <input type="checkbox"/>

SOURCE OPERATION REPORT - PAGE 1 & 2 (SOURCE REPORT 2 OF 5)
 FACILITY NAME: VERO BEACH POWER PLANT

SOURCE INFORMATION (AIR030)

1. Source Description		
FOSSIL FUEL STEAM GENERATOR UNIT #2		
2. DEP Permit or PPS Number	3. Source APIS ID	4. Source Status
AO31226295	30ORL31002902	A
5. Source Startup Date (MM/DD/YY)		6. Source Shutdown Date (DD/MM/YY)

SOURCE EMISSION POINT/CONTROL INFORMATION (AIR033)

1. Source Emission Point Type
2
2a. Description of Control Equipment 'a'
2b. Description of Control Equipment 'b'

SOURCE OPERATING SCHEDULE INFORMATION (AIR050)

1. Operated During Year?	2. Average Operation During Year	hour/day	day/week	3. Total Operation During Year (hour/year)	
Y		17.1	4.0	68.4	
4. Percent Hours of Operation by Season		DJF	MAM	JJA	SON
		0%	100%	0%	0%

Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE	
APIS ID	30	ORL	31	0029	02
					INPUT <input type="checkbox"/>

SOURCE PROCESS/FUEL INFORMATION (AIR050)

1a. SCC 'a'	2a. Description of Process or Type of Fuel	
10100601	EXTCOMB BOILER	ELECTRIC GENERATN
	NATURAL GAS	100MMBTU/HR EXTF
3a. Annual Process or Fuel Usage Rate (SCC Units)		
8.948 MILLION CUBIC FEET BURNED		
4a. Fuel Average % Sulphur	5a. Fuel Average % Ash	6a. Fuel Heat Content (mmBtu/SCC Units)
		1028

1b. SCC 'b'	2b. Description of Process or Type of Fuel	
10100401	EXTCOMB BOILER	ELECTRIC GENERATN
	RESIDUAL OIL	NO 6 OIL NORM FRG
3b. Annual Process or Fuel Usage Rate (SCC Units)		
0 1000 GALLONS BURNED		
4b. Fuel Average % Sulphur	5b. Fuel Average % Ash	6b. Fuel Heat Content (mmBtu/SCC Units)

1c. SCC 'c'	2c. Description of Process or Type of Fuel	
3c. Annual Process or Fuel Usage Rate (SCC Units)		
4c. Fuel Average % Sulphur	5c. Fuel Average % Ash	6c. Fuel Heat Content (mmBtu/SCC Units)

1d. SCC 'd'	2d. Description of Process or Type of Fuel	
3d. Annual Process or Fuel Usage Rate (SCC Units)		
4d. Fuel Average % Sulphur	5d. Fuel Average % Ash	6d. Fuel Heat Content (mmBtu/SCC Units)

Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE	INPUT
APIS ID 30	ORL	31	0029	02	<input type="checkbox"/>

SOURCE OPERATION REPORT - PAGE 3 & 4 (SOURCE REPORT 2 OF 5)

SOURCE DESCRIPTION: FOSSIL FUEL STEAM GENERATOR UNIT #2

SOURCE EMISSIONS INFORMATION (AIR051)

1a. Pollutant 'a' ID VOLATILE ORGANIC COMPOUNDS	2a. Annual Emissions (ton/year) 0.0076	3a. Emissions Method Code 3
4a. Emissions Calculation (1.7 Lb/mmcf * 8.948 mmcf) / 2000 = 0.0076 Tons		

1b. Pollutant 'b' ID SULFUR DIOXIDE	2b. Annual Emissions (ton/year) 0.0027	3b. Emissions Method Code 3
4b. Emissions Calculation (0.6 Lb/mmcf * 8.948 mmcf) / 2000 = 0.0027 Tons		

1c. Pollutant 'c' ID PARTICULATE MATTER - TOTAL	2c. Annual Emissions (ton/year) 0.0045	3c. Emissions Method Code 3
4c. Emissions Calculation (1.0 Lb/mmcf * 8.948 mmcf) / 2000 = 0.0045 Tons		

1d. Pollutant 'd' ID NITROGEN OXIDES	2d. Annual Emissions (ton/year) 2.46	3d. Emissions Method Code 3
4d. Emissions Calculation (550 Lb/mmcf * 8.948 mmcf) / 2000 = 2.46 Tons		

Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE	INPUT	
APIS ID	30	ORL	31	0029	02	<input type="text"/>

SOURCE EMISSIONS INFORMATION (Continued)

1e. Pollutant 'e' ID CARBON MONOXIDE	2e. Annual Emissions (ton/year) 0.179	3e. Emissions Method Code 3
4e. Emissions Calculation (40 Lb/mmcf * 8.948 mmcf) / 2000 = 0.179 Tons		

1f. Pollutant 'f' ID PARTICULATE MATTER - 10 MICRONS OR LESS	2f. Annual Emissions (ton/year) 0.0045	3f. Emissions Method Code 4
4f. Emissions Calculation (1.0 Lb/mmcf * 8.948 mmcf) / 2000 = 0.0045 Tons		

1g. Pollutant 'g' ID LEAD AND LEAD COMPOUNDS	2g. Annual Emissions (ton/year) 0.00027	3g. Emissions Method Code 4
4g. Emissions Calculation -5 (5.8 * 10 ⁻⁵ Lb/mmbtu * 8.948 mmcf * 1028 $\frac{\text{mmbtu}}{\text{mmcf}}$) / 2000 = 0.00027 Tons		

1h. Pollutant 'h' ID	2h. Annual Emissions (ton/year)	3h. Emissions Method Code
4h. Emissions Calculation		
5. Source Operation Report Comments		

Shaded areas are for DEP use.

Unit #3

AOR

1989 - 1993

V TOTAL FUEL USAGE including standby fuels. If fuel is oil, specify type and sulfur content (e.g., No. 6 oil with 1% S).

289.46 10⁶ cubic feet Natural Gas _____ 10³ Kerosene
178.41 10³ gallons #6 Oil, 2.0 %S _____ tons Coal
_____ 10³ gallons Propane _____ tons Carbonaceous
_____ 10⁶ Black Liquor Solids _____ tons Refuse
Other (Specify type and units) _____

VI EMISSION RATE(S) (tons/yr)

2.77 Particulates 28.10 Sulfur Dioxide N/A Total Reduced Sulfur
85.58 Nitrogen Oxide 6.24 Carbon Monoxide N/A Fluoride
0.34 Hydrocarbon Other (Specify type and units) _____

VII METHOD OF CALCULATING EMISSION RATES (e.g., use of fuel and materials balance, emission factors drawn from AP 42, etc.)

U.S. E.P.A. AP-42 Tables 1.3-1 and 1.4-1 (attached).

VIII CERTIFICATION:

I hereby certify that the information given in this report is correct to the best of my knowledge.

George W. Williams
SIGNATURE OF OWNER OR
AUTHORIZED REPRESENTATIVE

TYPED NAME AND TITLE

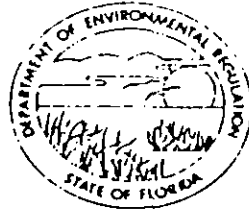
July 13, 1990
DATE

Unit #3

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER
DISTRICT

3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY
ALEX. SENKEVICH
DISTRICT MANAGER

ANNUAL OPERATION REPORT FORM FOR AIR EMISSIONS SOURCES

For each permitted emission point, please submit a separate report for calendar year 19 90 prior to March 1st of the following year.

I GENERAL INFORMATION

1. Source Name: Vero Beach Municipal Power Plant
2. Permit Number: A031-142513
3. Source Address: 100 - 17th Street
Vero Beach, Florida 32961-1389
4. Description of Source: Fossil Fuel Steam Generator Unit #3
417 mmBtu/hr Natural Gas, 410 mmBtu/hr #6 Fuel Oil

II ACTUAL OPERATING HOURS: 24 hrs/day 7 days/wk 24.20 wks/yr

III RAW MATERIAL INPUT PROCESS WEIGHT: (List separately all materials put into process and specify applicable units if other than tons/yr)

Raw Material	Input Process Weight
<u>N/A</u>	<u>tons/yr</u>
	<u>tons/yr</u>
	<u>tons/yr</u>
	<u>tons/yr</u>
	<u>tons/yr</u>

IV PRODUCT OUTPUT (Specify applicable units)

N/A

V TOTAL FUEL USAGE including standby fuels. If fuel is oil, specify type and sulfur content (e.g., No. 6 oil with 1% S).

542.01 10⁶ cubic feet Natural Gas _____ 10³ Kerosene
17.93 10³ gallons #6 Oil, 2.0 %S _____ tons Coal
_____ 10³ gallons Propane _____ tons Carbonaceous
_____ 10⁶ Black Liquor Solids _____ tons Refuse
Other (Specify type and units) _____

VI EMISSION RATE(S) (tons/yr)

1.56 Particulates 2.98 Sulfur Dioxide N/A Total Reduced Sulfur
149.65 Nitrogen Oxide 10.88 Carbon Monoxide N/A Fluoride
0.47 Hydrocarbon Other (Specify type and units) _____

VII METHOD OF CALCULATING EMISSION RATES (e.g., use of fuel and materials balance, emission factors drawn from AP 42, etc.)

U.S. E.P.A. AP-42 Tables 1.3-1 and 1.4-1 (attached)

VIII CERTIFICATION:

I hereby certify that the information given in this report is correct to the best of my knowledge.

Shuler W. Massey
SIGNATURE OF OWNER OR AUTHORIZED REPRESENTATIVE

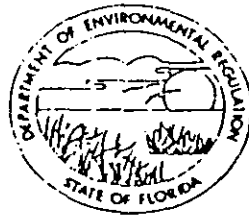
Shuler W. Massey
Director of Power Resources
TYPED NAME AND TITLE

5-10-91
DATE

Unit #3

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

T. JOHNS RIVER
DISTRICT
319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHNYEL
SECRETARY
ALEX SENKEVICH
DISTRICT MANAGER

ANNUAL OPERATION REPORT FORM FOR AIR EMISSIONS SOURCES

For each permitted emission point, please submit a separate report for calendar year 19 91 prior to March 1st of the following year.

I GENERAL INFORMATION

1. Source Name: Vero Beach Municipal Power Plant
2. Permit Number: A031-142513
3. Source Address: 100 - 17th Street
Vero Beach, Florida 32961-1389
4. Description of Source: Fossil Fuel Steam Generator Unit #3
417 mmBtu/hr Natural Gas, 410 mmBtu/hr #6 Fuel Oil

II ACTUAL OPERATING HOURS: 24 hrs/day 7 days/wk 31.14 wks/yr

III RAW MATERIAL INPUT PROCESS WEIGHT: (List separately all materials put into process and specify applicable units if other than tons/yr)

Raw Material	Input Process Weight
N/A	tons/yr
	tons/yr
	tons/yr
	tons/yr
	tons/yr

IV PRODUCT OUTPUT (Specify applicable units)

N/A

V TOTAL FUEL USAGE including standby fuels. If fuel is oil, specify type and sulfur content (e.g., No. 6 oil with 1% S).

640.70 10⁶ cubic feet Natural Gas _____ 10³ Kerosene
154.73 10³ gallons #6 Oil, 2 %S _____ tons Coal
_____ 10³ gallons Propane _____ tons Carbonaceous
_____ 10⁶ Black Liquor Solids _____ tons Refuse

Other (Specify type and units) _____

VI EMISSION RATE(S) (tons/yr)

3.38 Particulates 24.49 Sulfur Dioxide _____ Total Reduced Sulfur
181.38 Nitrogen Oxide 13.20 Carbon Monoxide _____ Fluoride
.63 Hydrocarbon Other (Specify type and units) _____

VII METHOD OF CALCULATING EMISSION RATES (e.g., use of fuel and materials balance, emission factors drawn from AP 42, etc.)

U.S. E.P.A. AP-42 Tables 1.3-1 and 1.4-1

VIII CERTIFICATION:

I hereby certify that the information given in this report is correct to the best of my knowledge.

Shuler W. Massey
SIGNATURE OF OWNER OR
AUTHORIZED REPRESENTATIVE

Shuler W. Massey, Director of Power Resources
TYPED NAME AND TITLE

11/23/92
DATE

APIS ID	District 3 0	Office 0 R L	County 3 1	Facility 0 0 2 9	Source 0 3	INPUT	
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--

SOURCE OPERATION REPORT - PAGE 1 & 2 (SOURCE REPORT 3 OF 5)
 FACILITY NAME: City of Vero Beach Municipal Power Plant

SOURCE INFORMATION (AIR030)

1. Source Description Unit 3 - Fuel Oil/Natural Gas Fired Steam Generator which operates a 34 MW Turbine/Generator		
2. DER Permit or PPS Number A031-142513	3. Source APIS ID 30 ORL 31 0029 03	4. Source Status A
5. Source Startup Date (MM/DD/YY)		6. Source Shutdown Date (MM/DD/YY)

SOURCE EMISSION POINT/CONTROL INFORMATION (AIR033)

1. Source Emission Point Type 1
2a. Description of Control Equipment 'a'
2b. Description of Control Equipment 'b'

SOURCE OPERATING SCHEDULE INFORMATION (AIR050)

1. Operated During Year?	2. Average Operation During Year	hour/day	day/week	3. Total Operation During Year (hour/year)	
Y		22.34	5.62	3,262.3	
4. Percent Hours of Operation by Season		DJF	MAM	JJA	SON
100%		19%	0	47%	34%

Shaded areas are for DER use.

APIS ID	District	Office	County	Facility	Source	INPUT
	3 0	O R L	3 1	0 0 2 9	0 3	

SOURCE PROCESS/FUEL INFORMATION (AIR050)

1a. SCC 'a'	2a. Description of Process or Type of Fuel Natural Gas	
3a. Annual Process or Fuel Usage Rate (SCC Units) 463.281		
4a. Fuel Average % Sulfur	5a. Fuel Average % Ash	6a. Fuel Heat Content (mmBtu/SCC Units) 1028

1b. SCC 'b'	2b. Description of Process or Type of Fuel	
3b. Annual Process or Fuel Usage Rate (SCC Units)		
4b. Fuel Average % Sulfur	5b. Fuel Average % Ash	6b. Fuel Heat Content (mmBtu/SCC Units)

1c. SCC 'c'	2c. Description of Process or Type of Fuel	
3c. Annual Process or Fuel Usage Rate (SCC Units)		
4c. Fuel Average % Sulfur	5c. Fuel Average % Ash	6c. Fuel Heat Content (mmBtu/SCC Units)

1d. SCC 'd'	2d. Description of Process or Type of Fuel	
3d. Annual Process or Fuel Usage Rate (SCC Units)		
4d. Fuel Average % Sulfur	5d. Fuel Average % Ash	6d. Fuel Heat Content (mmBtu/SCC Units)

Shaded areas are for DER use.

APIS ID	District 3 0	Office O R L	County 3 1	Facility 0 0 2 9	Source 0 3	INPUT		
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--	--

SOURCE OPERATION REPORT - PAGE 3 & 4 (SOURCE REPORT 3 OF 5)

SOURCE DESCRIPTION: Unit 3 Steam Generator

SOURCE EMISSIONS INFORMATION (AIR051)

1a. Pollutant 'a' ID CO	2a. Annual Emissions (ton/year) 9.27	3a. Emissions Method Code 3
----------------------------	---	--------------------------------

4a. Emissions Calculation
 $40 \text{ lb/mmcf} * 463.281 \text{ mmcf}/2000 \text{ lb/ton} = 9.27 \text{ tons}$

1b. Pollutant 'b' ID VOC (TOC)	2b. Annual Emissions (ton/year) 0.394	3b. Emissions Method Code 3
-----------------------------------	--	--------------------------------

4b. Emissions Calculation
 $1.7 \text{ lb/mmcf} * 463.281 \text{ mmcf}/2000 \text{ lb/ton} = 0.394 \text{ tons}$

1c. Pollutant 'c' ID PM	2c. Annual Emissions (ton/year) 0.232	3c. Emissions Method Code 3
----------------------------	--	--------------------------------

4c. Emissions Calculation
 $1 \text{ lb/mmcf} * 463.281 \text{ mmcf}/2000 \text{ lb/ton} = 0.232 \text{ tons}$

1d. Pollutant 'd' ID PM ₁₀	2d. Annual Emissions (ton/year) 1.84	3d. Emissions Method Code 4
--	---	--------------------------------

4d. Emissions Calculation
 $0.4 * .0193 \text{ lb/mmbtu} * 463.281 \text{ mmcf} * 1028 \text{ mmbtu/mmcf}/2000 \text{ lb/ton} = 1.84 \text{ ton}$

Shaded areas are for DER use.

APIS ID	District 3 0	Office O R L	County 3 1	Facility 0 0 2 9	Source 0 3	INPUT		
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--	--

SOURCE EMISSIONS INFORMATION (Continued)

1e. Pollutant 'e' ID NO _x	2e. Annual Emissions (ton/year) 127.4	3e. Emissions Method Code 3
---	--	--------------------------------

4e. Emissions Calculation
 $550 \text{ lb/mmcf} * 463.281 \text{ mmcf}/2000 \text{ lb/ton} = 127.4 \text{ tons}$

1f. Pollutant 'f' ID SO ₂	2f. Annual Emissions (ton/year) 0.14	3f. Emissions Method Code 3
---	---	--------------------------------

4f. Emissions Calculation
 $0.6 \text{ lb/mmcf} * 463.281 \text{ mmcf}/2000 \text{ lb/ton} = 0.14 \text{ tons}$

1g. Pollutant 'g' ID Pb	2g. Annual Emissions (ton/year) 0.014	3g. Emissions Method Code 4
----------------------------	--	--------------------------------

4g. Emissions Calculation
 $5.8 * 10^{-5} \text{ lb/mmbtu} * 463.281 \text{ mmcf} * 1028 \text{ mmbtu/mmcf}/2000 \text{ lb/ton} = 0.014 \text{ tons}$

1h. Pollutant 'h' ID	2h. Annual Emissions (ton/year)	3h. Emissions Method Code
----------------------	---------------------------------	---------------------------

4h. Emissions Calculation

5. Source Operation Report Comments

Shaded areas are for DER use.

District	Office	County	Facility	Source	INPUT
APIS ID 3 0	0 R L	3 1	0 0 2 9	0 3	

SOURCE OZONE-SIP REPORT - PAGE 5 & 6 (SOURCE REPORT 3 OF 5)
 SOURCE DESCRIPTION: Unit 3 Steam Generator

SOURCE OZONE-SIP PROCESS/FUEL INFORMATION (AIR052)

1. Existing 12/31/90? Y	2. Average Operation for Ozone Season (June thru August)	hour/day 22.34	day/week 6.3
----------------------------	--	-------------------	-----------------

3a. SCC 'a'	4a. Description of Process or Type of Fuel Natural GAS
-------------	---

5a. Daily Ozone Season Process or Fuel Usage Rate (SCC Units) 3.33

6a. Emission Factor (lb/SCC Unit)	VOC 1.7	NOx 550
-----------------------------------	------------	------------

7a. Comments

3b. SCC 'b'	4b. Description of Process or Type of Fuel
-------------	--

5b. Daily Ozone Season Process or Fuel Usage Rate (SCC Units)

6b. Emission Factor (lb/SCC Unit)	VOC	NOx
-----------------------------------	-----	-----

7b. Comments

Shaded areas are for DER use.

APIS ID	District	Office	County	Facility	Source	INPUT
3 0	0 R L	3 1	0 0 2 9	0 3		

SOURCE OZONE SIP EMISSIONS INFORMATION (AIR053)

1a. Pollutant ID VOC	2a. Ozone Season Emissions (lb/day) 5.66	3a. Emissions Method Code 3
-------------------------	---	--------------------------------

4a. Emissions Calculation 1.7 lb/mmcf * 3.33 mmcf/day = 5.66 lb/day
--

1b. Pollutant ID NOx	2b. Ozone Season Emissions (lb/day) 1,831.5	3b. Emissions Method Code 3
-------------------------	--	--------------------------------

4b. Emissions Calculation 550 lb/mmcf * 3.33 mmcf/day = 1,831.5 lb/day

Shaded areas are for DER use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE	
APIS ID	30	ORL	31	0029	03
					INPUT <input type="checkbox"/>

SOURCE OPERATION REPORT - PAGE 3 & 4 (SOURCE REPORT 3 OF 5)

SOURCE DESCRIPTION: ~~UNIT #3 PRIMARY GAS ALL EMISSIONS CALG ON OIL~~
FOSSIL FUEL STEAM GENERATOR UNIT #3

SOURCE EMISSIONS INFORMATION (AIR051)

1a. Pollutant 'a' ID VOLATILE ORGANIC COMPOUNDS	2a. Annual Emissions (ton/year) 0.25	3a. Emissions Method Code 3
4a. Emissions Calculation (1.7 Lb/mmcf * 293.119 mmcf) / 2000 = 0.25 Tons		

1b. Pollutant 'b' ID SULFUR DIOXIDE	2b. Annual Emissions (ton/year) 0.088	3b. Emissions Method Code 3
4b. Emissions Calculation (0.6 Lb/mmcf * 293.119 mmcf) / 2000 = 0.088 Tons		

1c. Pollutant 'c' ID PARTICULATE MATTER - TOTAL	2c. Annual Emissions (ton/year) 0.15	3c. Emissions Method Code 3
4c. Emissions Calculation (1 Lb/mmcf * 293.119 mmcf) / 2000 = 0.15 Tons		

1d. Pollutant 'd' ID NITROGEN OXIDES	2d. Annual Emissions (ton/year) 80.61	3d. Emissions Method Code 3
4d. Emissions Calculation (550 Lb/mmcf * 293.119 mmcf) / 2000 = 80.61 Tons		

Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE		
APIS ID	30	ORL	31	0029	03	INPUT <input type="checkbox"/>

SOURCE EMISSIONS INFORMATION (Continued)

1e. Pollutant 'e' ID	2e. Annual Emissions (ton/year)	3e. Emissions Method Code
CARBON MONOXIDE	5.86	3
4e. Emissions Calculation		
$(40 \text{ Lb/mmcf} * 293.119 \text{ mmcf}) / 2000 = 5.86 \text{ Tons}$		

1f. Pollutant 'f' ID	2f. Annual Emissions (ton/year)	3f. Emissions Method Code
PARTICULATE MATTER - 10 MICRONS OR LESS	0.15	4
4f. Emissions Calculation		
$(1.0 \text{ Lb/mmcf} * 293.119 \text{ mmcf}) / 2000 = 0.15 \text{ Tons}$		

1g. Pollutant 'g' ID	2g. Annual Emissions (ton/year)	3g. Emissions Method Code
LEAD AND LEAD COMPOUNDS	0.0087	4
4g. Emissions Calculation		
$(5.8 * 10^{-5} \text{ Lb/mmbtu} * 293.119 \text{ mmcf} * 1028 \frac{\text{mmbtu}}{\text{mmcf}}) / 2000 = 0.0087 \text{ Tons}$		

1h. Pollutant 'h' ID	2h. Annual Emissions (ton/year)	3h. Emissions Method Code
4h. Emissions Calculation		
5. Source Operation Report Comments		

Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE	
APIS ID	30	ORL	31 0029	03	INPUT <input type="checkbox"/>

SOURCE OPERATION REPORT - PAGE 1 & 2 (SOURCE REPORT 3 OF 5)
 FACILITY NAME: VERO BEACH POWER PLANT

SOURCE INFORMATION (AIR030)

1. Source Description Fossil Fuel Steam Generator Unit # 3 UNIT #3 PRIMARY GAS ALL EMISSIONS CALC ON OIL		
2. DEP Permit or PPS Number AO31224290	3. Source APIS ID 30ORL31002903	4. Source Status A
5. Source Startup Date (MM/DD/YY)	6. Source Shutdown Date (DD/MM/YY)	

SOURCE EMISSION POINT/CONTROL INFORMATION (AIR033)

1. Source Emission Point Type SINGLE POINT 1
2a. Description of Control Equipment 'a'
2b. Description of Control Equipment 'b'

SOURCE OPERATING SCHEDULE INFORMATION (AIR050)

1. Operated During Year?	2. Average Operation During Year	hour/day	day/week	3. Total Operation During Year (hour/year)	
Y		22.68	5.47	1,859.8	
4. Percent Hours of Operation by Season		DJF	MAM	JJA	SON
		25%	3%	3%	69%

Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE		
APIS ID	30	ORL	31	0029	03	INPLT <input type="checkbox"/>

SOURCE PROCESS/FUEL INFORMATION (AIR050)

1a. SCC 'a'	2a. Description of Process or Type of Fuel	
10100801	EXTCOMB BOILER	ELECTRIC GENERATN
	NATURAL GAS	100MMBTU/HR EXTF
3a. Annual Process or Fuel Usage Rate (SCC Units)		
293.119		MILLION CUBIC FEET BURNED
4a. Fuel Average % Sulphur	5a. Fuel Average % Ash	6a. Fuel Heat Content (mmBtu/SCC Units)
		1028

1b. SCC 'b'	2b. Description of Process or Type of Fuel	
10100401	EXTCOMB BOILER	ELECTRIC GENERATN
	RESIDUAL OIL	NO 6 OIL NORM FRG
3b. Annual Process or Fuel Usage Rate (SCC Units)		
0		1000 GALLONS BURNED
4b. Fuel Average % Sulphur	5b. Fuel Average % Ash	6b. Fuel Heat Content (mmBtu/SCC Units)

1c. SCC 'c'	2c. Description of Process or Type of Fuel	
3c. Annual Process or Fuel Usage Rate (SCC Units)		
4c. Fuel Average % Sulphur	5c. Fuel Average % Ash	6c. Fuel Heat Content (mmBtu/SCC Units)

1d. SCC 'd'	2d. Description of Process or Type of Fuel	
3d. Annual Process or Fuel Usage Rate (SCC Units)		
4d. Fuel Average % Sulphur	5d. Fuel Average % Ash	6d. Fuel Heat Content (mmBtu/SCC Units)

Shaded areas are for DEP use.

Unit #4

AOR

1989 - 1993

TOTAL FUEL USAGE including standby fuels. If fuel is oil, specify type and sulfur content (e.g., No. 6 oil with 1% S).

1923.38 10⁶ cubic feet Natural Gas _____ 10³ Kerosene
290.93 10³ gallons #6 Oil, 0.7 %S _____ tons Coal
_____ 10³ gallons Propane _____ tons Carbonaceous
_____ 10⁶ Black Liquor Solids _____ tons Refuse
Other (Specify type and units) _____

EMISSION RATE(S) (tons/yr)

6.26 Particulates 16.57 Sulfur Dioxide N/A Total Reduced Sulfur
150.71 Nitrogen Oxide 39.20 Carbon Monoxide N/A Fluoride
1.78 Hydrocarbon Other (Specify type and units) _____

I METHOD OF CALCULATING EMISSION RATES (e.g., use of fuel and materials balance, emission factors drawn from AP 42, etc.)

Calculations are based on data from 1989 Stack Test for NOX on Gas conducted by Air Consulting and Engineering. All others: U.S. E.P.A. AP-42, Tables 1.3-1 and 1.4-1 (attached).

II CERTIFICATION:

hereby certify that the information given in this report is correct to the best of my knowledge.

George W. Williams
SIGNATURE OF OWNER OR
AUTHORIZED REPRESENTATIVE
July 13 1990
DATE

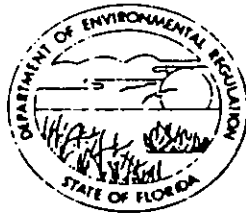
TYPED NAME AND TITLE

Unit #4

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER
DISTRICT

3319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803



BOB GRAHAM
GOVERNOR

VICTORIA J. TSCHINKEL
SECRETARY

ALEX. SENKEVICH
DISTRICT MANAGER

ANNUAL OPERATION REPORT FORM FOR AIR EMISSIONS SOURCES

For each permitted emission point, please submit a separate report for calendar year 19 89 prior to March 1st of the following year.

I GENERAL INFORMATION

1. Source Name: Vero Beach Municipal Power Plant

2. Permit Number: A031-146712

3. Source Address: 100-17th Street

Vero Beach, Florida 32961-1389

4. Description of Source: Fossil Fuel Steam Generator Unit #4, 685 mmBtu/hr unit
Operating fuel combination of Natural Gas and #6 Fuel Oil. Percentage not to exceed 32 percent
of total heat input, #4 as backup.

II ACTUAL OPERATING HOURS: 24 hrs/day 7 days/wk 41.02 wks/yr

III RAW MATERIAL INPUT PROCESS WEIGHT: (List separately all materials put into process and specify applicable units if other than tons/yr)

Raw Material

Input Process Weight

N/A

_____ tons/yr

_____ tons/yr

_____ tons/yr

_____ tons/yr

_____ tons/yr

IV PRODUCT OUTPUT (Specify applicable units)

N/A

TOTAL FUEL USAGE including standby fuels. If fuel is oil, specify type and sulfur content (e.g., No. 6 oil with 1% S).

2079.7 10⁶ cubic feet Natural Gas _____ 10³ Kerosene
69.76 10³ gallons #6 Oil, 0.7 %S _____ tons Coal
_____ 10³ gallons Propane _____ tons Carbonaceous
_____ 10⁶ Black Liquor Solids _____ tons Refuse
Other (Specify type and units) _____

EMISSION RATE(S) (tons/yr)

5.55 Particulates 4.46 Sulfur Dioxide N/A Total Reduced Sulfur
155.82 Nitrogen Oxide 41.77 Carbon Monoxide N/A Fluoride
1.80 Hydrocarbon Other (Specify type and units) _____

I METHOD OF CALCULATING EMISSION RATES (e.g., use of fuel and materials balance, emission factors drawn from AP 42, etc.)

Calculations are based on data from 1990 Stack Test for NOX on Gas conducted by Air Consulting and Engineering. All others: U.S. E.P.A. AP-42, Tables 1.3-1 and 1.4-1 (attached).

II CERTIFICATION:

I hereby certify that the information given in this report is correct to the best of my knowledge.

Shuler W. Massey
SIGNATURE OF OWNER OR
AUTHORIZED REPRESENTATIVE

Shuler W. Massey
Director of Power Resources

TYPED NAME AND TITLE

5-10-91
DATE

Unit #4

183 ER/S.

TOTAL FUEL USAGE including standby fuels. If fuel is oil, specify type and sulfur content (e.g., No. 6 oil with 1% S).

<u>1221.4</u> 10 ⁶ cubic feet Natural Gas	_____ 10 ³ Kerouene
<u>7.7</u> 10 ³ gallons #6 Oil, <u>2.0</u> %S	_____ tons Coal
_____ 10 ³ gallons Propane	_____ tons Carbonaceous
_____ 10 ⁶ Black Liquor Solids	_____ tons Refuse

Other (Specify type and units) _____

I EMISSION RATE(S) (tons/yr)

<u>3.142</u> Particulates	<u>1.57</u> Sulfur Dioxide	_____ Total Reduced Sulfur
<u>336.135</u> Nitrogen Oxide	<u>24.45</u> Carbon Monoxide	_____ Fluoride
<u>1.04</u> Hydrocarbon	Other (Specify type and units) _____	

II METHOD OF CALCULATING EMISSION RATES (e.g., use of fuel and materials balance, emission factors drawn from AP 42, etc.)

Calculations are based on data from 1991 stack test for nox on gas generation conducted by Air Consulting and Engineering. All others U.S. E.P.A. AP-42 tables 1.3-1 and 1.4-1

III CERTIFICATION:

I hereby certify that the information given in this report is correct to the best of my knowledge.

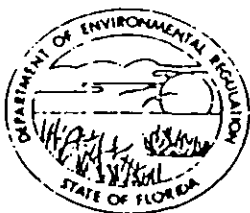
Shuler W. Massey
 SIGNATURE OF OWNER OR
 AUTHORIZED REPRESENTATIVE

Shuler W. Massey, Director of Power Resources
 TYPED NAME AND TITLE

1/23/92
 DATE

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

ST. JOHNS RIVER
DISTRICT
319 MAGUIRE BOULEVARD
SUITE 232
ORLANDO, FLORIDA 32803



BOB GRAHAM
GOVERNOR
VICTORIA J. TSCHINKEL
SECRETARY
ALEX SENKEVICH
DISTRICT MANAGER

ANNUAL OPERATION REPORT FORM FOR AIR EMISSIONS SOURCES

For each permitted emission point, please submit a separate report for calendar year 19 91 prior to March 1st of the following year.

I GENERAL INFORMATION

1. Source Name: Vero Beach Municipal Power Plant

2. Permit Number: A031-146712

3. Source Address: 100 - 17th Street

Vero Beach, Florida 32961-1389

4. Description of Source: Fossil Fuel Steam Generator Unit #4, 685 mmBtu/hr unit firing fuel combination of Natural Gas and #6 Fuel Oil. Percentage not to exceed 32 percent of total heat input, #4 as backup.

II ACTUAL OPERATING HOURS: 24 hrs/day 7 days/wk 31.11 wks/yr

III RAW MATERIAL INPUT PROCESS WEIGHT: (List separately all materials put into process and specify applicable units if other than tons/yr)

Raw Material	Input Process Weight
N/A	tons/yr
_____	tons/yr
_____	tons/yr
_____	tons/yr
_____	tons/yr

IV PRODUCT OUTPUT (Specify applicable units)

N/A

District	Office	County	Facility	Source	INPUT
APIS ID 30	ORL	31	0029	04	

SOURCE OPERATION REPORT - PAGE 1 & 2 (SOURCE REPORT 4 OF 5)
 FACILITY NAME: City of Vero Beach Municipal Power Plant

SOURCE INFORMATION (AIR030)

1. Source Description Unit 4 - Fuel Oil/Natural Gas fired Steam Generator which operates a 56 MW Turbine/Generator		
2. DER Permit or PPS Number A031-146712	3. Source APIS ID 30 ORL 31 0029 04	4. Source Status A
5. Source Startup Date (MM/DD/YY)		6. Source Shutdown Date (MM/DD/YY)

SOURCE EMISSION POINT/CONTROL INFORMATION (AIR033)

1. Source Emission Point Type 1
2a. Description of Control Equipment 'a'
2b. Description of Control Equipment 'b'

SOURCE OPERATING SCHEDULE INFORMATION (AIR050)

1. Operated During Year? Y	2. Average Operation During Year	hour/day 23.3	day/week 6.5	3. Total Operation During Year (hour/year) 7,526.2
4. Percent Hours of Operation by Season	DJF	MAM	JJA	SON
100%	21%	26%	28%	25%

Shaded areas are for DER use.

APIS ID	District 3 0	Office O R L	County 3 1	Facility 0 0 2 9	Source 0 4	INPUT	
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--

SOURCE PROCESS/FUEL INFORMATION (AIR050)

1a. SCC 'a'	2a. Description of Process or Type of Fuel Natural Gas	
3a. Annual Process or Fuel Usage Rate (SCC Units) 2,068.398		
4a. Fuel Average % Sulfur	5a. Fuel Average % Ash	6a. Fuel Heat Content (mmBtu/SCC Units) 1028

1b. SCC 'b'	2b. Description of Process or Type of Fuel	
3b. Annual Process or Fuel Usage Rate (SCC Units)		
4b. Fuel Average % Sulfur	5b. Fuel Average % Ash	6b. Fuel Heat Content (mmBtu/SCC Units)

1c. SCC 'c'	2c. Description of Process or Type of Fuel	
3c. Annual Process or Fuel Usage Rate (SCC Units)		
4c. Fuel Average % Sulfur	5c. Fuel Average % Ash	6c. Fuel Heat Content (mmBtu/SCC Units)

1d. SCC 'd'	2d. Description of Process or Type of Fuel	
3d. Annual Process or Fuel Usage Rate (SCC Units)		
4d. Fuel Average % Sulfur	5d. Fuel Average % Ash	6d. Fuel Heat Content (mmBtu/SCC Units)

Shaded areas are for DER use.

APIS ID	District 30	Office ORL	County 31	Facility 0029	Source 04	INPUT	
---------	----------------	---------------	--------------	------------------	--------------	-------	--

SOURCE OPERATION REPORT - PAGE 3 & 4 (SOURCE REPORT 4 OF 5)
 SOURCE DESCRIPTION: Unit 4 Steam Generator

SOURCE EMISSIONS INFORMATION (AIR051)

1a. Pollutant 'a' ID CO	2a. Annual Emissions (ton/year) 41.4	3a. Emissions Method Code 3
4a. Emissions Calculation 40 lb/mmcf * 2,068.398 mmcf/2000 lb/ton = 41.4 tons		

1b. Pollutant 'b' ID VOC (TOC)	2b. Annual Emissions (ton/year) 1.76	3b. Emissions Method Code 3
4b. Emissions Calculation 1.7 lb/mmcf * 2,068.398 mmcf/2000 lb/ton = 1.76 tons		

1c. Pollutant 'c' ID PM	2c. Annual Emissions (ton/year) 1.03	3c. Emissions Method Code 3
4c. Emissions Calculation 1 lb/mmcf * 2,068.398 mmcf/2000 lb/ton = 1.03 tons		

1d. Pollutant 'd' ID PM ₁₀	2d. Annual Emissions (ton/year) 8.2	3d. Emissions Method Code 4
4d. Emissions Calculation 0.4 * .0193 lb/mmbtu * 2,068.398 mmcf * 1028 mmbtu/mmcf/2000 lb/ton = 8.2 tons		

Shaded areas are for DER use.

APIS ID	District 3 0	Office O R L	County 3 1	Facility 0 0 2 9	Source 0 4	INPUT	
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--

SOURCE EMISSIONS INFORMATION (Continued)

1e. Pollutant 'e' ID NO _x	2e. Annual Emissions (ton/year) 568.8	3e. Emissions Method Code 3
---	--	--------------------------------

4e. Emissions Calculation
 $550 \text{ lb/mmcf} * 2,068.398 \text{ mmcf}/2000 \text{ lb/ton} = 568.8 \text{ tons}$

1f. Pollutant 'f' ID SO ₂	2f. Annual Emissions (ton/year) 0.62	3f. Emissions Method Code 3
---	---	--------------------------------

4f. Emissions Calculation
 $0.6 \text{ lb/mmcf} * 2,068.398 \text{ mmcf}/2000 \text{ lb/ton} = 0.62 \text{ tons}$

1g. Pollutant 'g' ID Pb	2g. Annual Emissions (ton/year) 0.062	3g. Emissions Method Code 4
----------------------------	--	--------------------------------

4g. Emissions Calculation
 $5.8 * 10^{-5} \text{ lb/mmbtu} * 2,068.398 \text{ mmcf} * 1028 \text{ mmbtu/mmcf}/2000 \text{ lb/ton} = 0.062 \text{ tons}$

1h. Pollutant 'h' ID	2h. Annual Emissions (ton/year)	3h. Emissions Method Code
----------------------	---------------------------------	---------------------------

4h. Emissions Calculation

5. Source Operation Report Comments

Shaded areas are for DER use.

District	Office	County	Facility	Source	INPUT
APIS ID 3 0	0 R L	3 1	0 0 2 9	0 4	

SOURCE OZONE-SIP REPORT - PAGE 5 & 6 (SOURCE REPORT 4 OF 5)
 SOURCE DESCRIPTION: Unit 4 Steam Generator

SOURCE OZONE-SIP PROCESS/FUEL INFORMATION (AIR052)

1. Existing 12/31/90? Y	2. Average Operation for Ozone Season (June thru August)	hour/day 23.11	day/week 7
----------------------------	--	-------------------	---------------

3a. SCC 'a'	4a. Description of Process or Type of Fuel Natural Gas
-------------	---

5a. Daily Ozone Season Process or Fuel Usage Rate (SCC Units) 7.33

6a. Emission Factor (lb/SCC Unit)	VOC 1.7	NOx 550
-----------------------------------	------------	------------

7a. Comments

3b. SCC 'b'	4b. Description of Process or Type of Fuel
-------------	--

5b. Daily Ozone Season Process or Fuel Usage Rate (SCC Units)

6b. Emission Factor (lb/SCC Unit)	VOC	NOx
-----------------------------------	-----	-----

7b. Comments

Shaded areas are for DER use.

APIS ID	<table border="1"> <tr><td>3</td><td>0</td></tr> </table>	3	0	<table border="1"> <tr><td>0</td><td>R</td><td>L</td></tr> </table>	0	R	L	<table border="1"> <tr><td>3</td><td>1</td></tr> </table>	3	1	<table border="1"> <tr><td>0</td><td>0</td><td>2</td><td>9</td></tr> </table>	0	0	2	9	<table border="1"> <tr><td>0</td><td>4</td><td></td></tr> </table>	0	4		INPUT	<table border="1"> <tr><td></td><td></td></tr> </table>		
3	0																						
0	R	L																					
3	1																						
0	0	2	9																				
0	4																						

SOURCE OZONE SIP EMISSIONS INFORMATION (AIR053)

1a. Pollutant ID VOC	2a. Ozone Season Emissions (lb/day) 12.5	3a. Emissions Method Code 3
4a. Emissions Calculation 1.7 lb/mmcf * 7.33 mmcf/day = 12.5 lb/day		

1b. Pollutant ID NOx	2b. Ozone Season Emissions (lb/day) 4,031.5	3b. Emissions Method Code 3
4b. Emissions Calculation 550 lb/mmcf * 7.33 mmcf/day = 4,031.5 lb/day		

Shaded areas are for DER use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE		
APIS ID	30	ORL	31	0029	04	INPLT <input type="checkbox"/>

SOURCE OPERATION REPORT - PAGE 1 & 2 (SOURCE REPORT 4 OF 5)
 FACILITY NAME: VERO BEACH POWER PLANT

SOURCE INFORMATION (AIR030)

1. Source Description		
FOSSIL FUEL STEAM GENERATOR UNIT#4		
2. DEP Permit or PPS Number	3. Source APIS ID	4. Source Status
AO31229058	30ORL31002904	A
5. Source Startup Date (MM/DD/YY)		6. Source Shutdown Date (DD/MM/YY)

SOURCE EMISSION POINT/CONTROL INFORMATION (AIR033)

1. Source Emission Point Type
POINTS REGULATED AS ONE 1
2a. Description of Control Equipment 'a'
2b. Description of Control Equipment 'b'

SOURCE OPERATING SCHEDULE INFORMATION (AIR050)

1. Operated During Year?	2. Average Operation During Year	hour/day	day/week	3. Total Operation During Year (hour/year)	
Y		23.74	6.95	6,101.13	
4. Percent Hours of Operation by Season		DJF	MAM	JJA	SON
		28%	24%	32%	16%

Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE	
APIS ID	30	ORL	31	0029	04
					INPUT <input type="checkbox"/>

SOURCE OPERATION REPORT - PAGE 3 & 4 (SOURCE REPORT 4 OF 5)

SOURCE DESCRIPTION: FOSSIL FUEL STEAM GENERATOR UNIT#4

SOURCE EMISSIONS INFORMATION (AIR051)

1a. Pollutant 'a' ID VOLATILE ORGANIC COMPOUNDS	2a. Annual Emissions (ton/year) 1.23	3a. Emissions Method Code 3
4a. Emissions Calculation (1.7 Lb/mmcf * 1448.986 mmcf) / 2000 = 1.23 Tons		

1b. Pollutant 'b' ID SULFUR DIOXIDE	2b. Annual Emissions (ton/year) 0.435	3b. Emissions Method Code 3
4b. Emissions Calculation (0.6 Lb/mmcf * 1448.986 mmcf) / 2000 = 0.435 Tons		

1c. Pollutant 'c' ID PARTICULATE MATTER - TOTAL	2c. Annual Emissions (ton/year) 0.724	3c. Emissions Method Code 3
4c. Emissions Calculation (1.0 Lb/mmcf * 1448.986 mmcf) / 2000 = 0.724 Tons		

1d. Pollutant 'd' ID NITROGEN OXIDES	2d. Annual Emissions (ton/year) 398.47	3d. Emissions Method Code 3
4d. Emissions Calculation (550 Lb/mmcf * 1448.986 mmcf) / 2000 = 398.47 Tons		

Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE	INPUT
APIS ID	30	ORL	31	0029	04

SOURCE EMISSIONS INFORMATION (Continued)

1e. Pollutant 'e' ID CARBON MONOXIDE	2e. Annual Emissions (ton/year) 28.98	3e. Emissions Method Code 3
4e. Emissions Calculation (40 Lb/mmcf * 1448.986 mmcf) / 2000 = 28.98 Tons		

1f. Pollutant 'f' ID PARTICULATE MATTER - 10 MICRONS OR LESS	2f. Annual Emissions (ton/year) 0.724	3f. Emissions Method Code 4
4f. Emissions Calculation (1.0 Lb/mmcf * 1448.986 mmcf) / 2000 = 0.724 Tons		

1g. Pollutant 'g' ID LEAD AND LEAD COMPOUNDS	2g. Annual Emissions (ton/year) 0.043	3g. Emissions Method Code 4
4g. Emissions Calculation $(5.8 * 10^{-5} \text{ Lb/mmbtu} * 1448.986 \text{ mmcf} * 1028 \frac{\text{mmbtu}}{\text{mmcf}}) / 2000 = 0.043 \text{ Tons}$		

1h. Pollutant 'h' ID	2h. Annual Emissions (ton/year)	3h. Emissions Method Code
4h. Emissions Calculation		
5. Source Operation Report Comments		

Shaded areas are for DEP use.

Unit #5

AOR

1992 - 1993

District	Office	County	Facility	Source	INPUT
APIS ID 3 0	0 R L	3 1	0 0 2 9	0 5	

SOURCE OPERATION REPORT - PAGE 1 & 2 (SOURCE REPORT 5 OF 5)

FACILITY NAME: City of Vero Beach Municipal Power Plant

SOURCE INFORMATION (AIR030)

1. Source Description Unit 5 : Fuel oil/Natural gas fired 40 MW combustion turbine/generator with a by-pass stack for simple cycle operation and a HRSG stack for combined cycle operation with Unit 2 steam turbine		
2. DER Permit or PPS Number AC31-184928	3. Source APIS ID 30 ORL 31 0029 05	4. Source Status A
5. Source Startup Date (MM/DD/YY) 10/08/92	6. Source Shutdown Date (MM/DD/YY)	

SOURCE EMISSION POINT/CONTROL INFORMATION (AIR033)

1. Source Emission Point Type 1
2a. Description of Control Equipment 'a' Water injection for NOx control
2b. Description of Control Equipment 'b'

SOURCE OPERATING SCHEDULE INFORMATION (AIR050)

1. Operated During Year?	2. Average Operation During Year	hour/day	day/week	3. Total Operation During Year (hour/year)	
Y		7.3	2	102.8	
4. Percent Hours of Operation by Season		DJF	MAM	JJA	SON
100%		0	0	0	100%

Shaded areas are for DER use.

APIS ID	District	Office	County	Facility	Source	INPUT
	3 0	0 R L	3 1	0 0 2 9	0 5	

SOURCE PROCESS/FUEL INFORMATION (AIR050)

1a. SCC 'a'		2a. Description of Process or Type of Fuel	
		Natural Gas	
3a. Annual Process or Fuel Usage Rate (SCC Units)			
14.706			
4a. Fuel Average % Sulfur	5a. Fuel Average % Ash	6a. Fuel Heat Content (mmBtu/SCC Units)	
		1028	

1b. SCC 'b'		2b. Description of Process or Type of Fuel	
		No. 2 Fuel oil	
3b. Annual Process or Fuel Usage Rate (SCC Units)			
35.238			
4b. Fuel Average % Sulfur	5b. Fuel Average % Ash	6b. Fuel Heat Content (mmBtu/SCC Units)	
0.15		140.178	

1c. SCC 'c'		2c. Description of Process or Type of Fuel	
3c. Annual Process or Fuel Usage Rate (SCC Units)			
4c. Fuel Average % Sulfur	5c. Fuel Average % Ash	6c. Fuel Heat Content (mmBtu/SCC Units)	

1d. SCC 'd'		2d. Description of Process or Type of Fuel	
3d. Annual Process or Fuel Usage Rate (SCC Units)			
4d. Fuel Average % Sulfur	5d. Fuel Average % Ash	6d. Fuel Heat Content (mmBtu/SCC Units)	

Shaded areas are for DER use.

District	Office	County	Facility	Source	INPUT
APIS ID 3 0	0 R L	3 1	0 0 2 9	0 5	

SOURCE OPERATION REPORT - PAGE 3 & 4 (SOURCE REPORT 5 OF 5)

SOURCE DESCRIPTION: Unit 5 Combustion Turbine

SOURCE EMISSIONS INFORMATION (AIR051)

1a. Pollutant 'a' ID CO	2a. Annual Emissions (ton/year) 0.949	3a. Emissions Method Code 3
4a. Emissions Calculation Nat. Gas: .11 lb/mmbtu * 14.706 mmcf * 1028 mmbtu/mmcf/2000 lb/ton = 0.83 tons #2 F.O.: .048 lb/mmbtu * 35.238 mgal * 140.178 mmbtu/mgal/2000 lb/ton = 0.119 tons 0.83 + 0.119 = 0.949 tons		

1b. Pollutant 'b' ID VOC (TOC)	2b. Annual Emissions (ton/year) 0.22	3b. Emissions Method Code 3
4b. Emissions Calculation Nat. Gas: .024 lb/mmbtu * 14.706 mmcf * 1028 mmbtu/mmcf/2000 lb/ton = 0.18 tons #2 F.O.: .017 lb/mmbtu * 35.238 mgal * 140.178 mmbtu/mgal/2000 lb/ton = 0.04 tons 0.18 + .04 = 0.22 tons		

1c. Pollutant 'c' ID PM	2c. Annual Emissions (ton/year) 0.24	3c. Emissions Method Code 3
4c. Emissions Calculation Nat. Gas: .0193 lb/mmbtu * 14.706 mmcf * 1028 mmbtu/mmcf/2000 lb/ton = 0.146 tons #2 F.O.: .038 lb/mmbtu * 35.238 mgal * 140.178 mmbtu/mgal/2000 lb/ton = 0.094 tons 0.146 + .094 = 0.24 tons		

1d. Pollutant 'd' ID PM10	2d. Annual Emissions (ton/year) 0.1	3d. Emissions Method Code 3
4d. Emissions Calculation Nat. Gas: .4 * .0193 lb/mmbtu * 14.706 mmcf * 1028 mmbtu/mmcf/2000 lb/ton=0.06 tons #2 F.O.: .4 * .038 lb/mmbtu * 35.238 mgal * 140.178 mmbtu/mgal/2000 lb/ton=0.04 tons 0.06 + .04 = 0.1 tons		

Shaded areas are for DER use.

APIS ID	District 3 0	Office O R L	County 3 1	Facility 0 0 2 9	Source 0 5	INPUT	
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--

SOURCE EMISSIONS INFORMATION (Continued)

1e. Pollutant 'e' ID NOx	2e. Annual Emissions (ton/year) 5.05	3e. Emissions Method Code 3
4e. Emissions Calculation Nat. Gas: .44 lb/mmbtu * 14.706 mmcf * 1028 mmbtu/mmcf/2000 lb/ton = 3.33 tons #2 F.O.: .698 lb/mmbtu * 35.238 mgal * 140.178 mmbtu/mgal/2000 lb/ton = 1.72 tons 3.33 + 1.72 = 5.05		

1f. Pollutant 'f' ID SO2	2f. Annual Emissions (ton/year) 0.0084	3f. Emissions Method Code 4
4f. Emissions Calculation Nat. Gas: .6 lb/mmcf * 14.706 mmcf/2000 lb/ton = 0.0044 tons #2 F.O.: 142 lb/mgal * .0015 * 35.238 mgal/2000 lb/ton = 0.004 tons 0.0044 + 0.004 = 0.0084 tons		

1g. Pollutant 'g' ID Pb	2g. Annual Emissions (ton/year) 0.00058	3g. Emissions Method Code 3
4g. Emissions Calculation Nat. Gas: 5.8 * 10 ⁻⁵ lb/mmbtu * 14.706 mmcf * 1028 mmbtu/mmcf/2000 lb/ton = 0.00044 tons #2 F.O.: 5.8 * 10 ⁻⁵ lb/mmbtu * 35.238 mgal * 140.178 mmbtu/mgal/2000 lb/ton = 0.00014 tons 0.00044 + .00014 = 0.00058 tons		

1h. Pollutant 'h' ID 114	2h. Annual Emissions (ton/year) 0.000007	3h. Emissions Method Code 5
4h. Emissions Calculation 3 * 10 ⁻⁶ lb/mmbtu * 35.238 mgal * 140.178 mmbtu/mgal/2000 lb/ton = 0.000007 tons		

5. Source Operation Report Comments

Shaded areas are for DER use.

APIS ID	District 3 0	Office O R L	County 3 1	Facility 0 0 2 9	Source 0 5	INPUT	
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--

SOURCE EMISSIONS INFORMATION (Continued)

1i. Pollutant 'c' ID 021	2i. Annual Emissions (ton/year) 0.000006	3i. Emissions Method Code 5
4i. Emissions Calculation $2.5 * 10^{-6} \text{ lb/mmbtu} * 35.238 \text{ mgal} * 140.178 \text{ mmbtu/mgal} / 2000 \text{ lb/ton} = 0.000006 \text{ tons}$		

1j. Pollutant 'f' ID SAM	2j. Annual Emissions (ton/year) 0.02	3j. Emissions Method Code 5
4j. Emissions Calculation $8.1 * 10^{-3} \text{ lb/mmbtu} * 35.238 \text{ mgal} * 140.178 \text{ mmbtu/mgal} / 2000 \text{ lb/ton} = 0.02 \text{ tons}$		

1g. Pollutant 'g' ID	2g. Annual Emissions (ton/year)	3g. Emissions Method Code
4g. Emissions Calculation		

1h. Pollutant 'h' ID	2h. Annual Emissions (ton/year)	3h. Emissions Method Code
4h. Emissions Calculation		

5. Source Operation Report Comments

Shaded areas are for DER use.

APIS ID	District 3 0	Office 0 R L	County 3 1	Facility 0 0 2 9	Source 0 5	INPUT		
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--	--

SOURCE OZONE-SIP REPORT - PAGE 5 & 6 (SOURCE REPORT 5 OF 5)

SOURCE DESCRIPTION: Unit 5 Combustion Turbine

SOURCE OZONE-SIP PROCESS/FUEL INFORMATION (AIR052)

1. Existing 12/31/90? N	2. Average Operation for Ozone Season (June thru August)	hour/day 0	day/week 0
----------------------------	--	---------------	---------------

3a. SCC 'a'	4a. Description of Process or Type of Fuel
-------------	--

5a. Daily Ozone Season Process or Fuel Usage Rate (SCC Units) 0
--

6a. Emission Factor (lb/SCC Unit)	VOC	NOx
--------------------------------------	-----	-----

7a. Comments Unit 5 was under construction during ozone season.
--

3b. SCC 'b'	4b. Description of Process or Type of Fuel
-------------	--

5b. Daily Ozone Season Process or Fuel Usage Rate (SCC Units)

6b. Emission Factor (lb/SCC Unit)	VOC	NOx
--------------------------------------	-----	-----

7b. Comments

Shaded areas are for DER use.

APIS ID	District 3 0	Office 0 R L	County 3 1	Facility 0 0 2 9	Source 0 5	INPUT		
---------	-----------------	-----------------	---------------	---------------------	---------------	-------	--	--

SOURCE OZONE SIP EMISSIONS INFORMATION (AIR053)

1a. Pollutant ID VOC	2a. Ozone Season Emissions (lb/day) 0	3a. Emissions Method Code
4a. Emissions Calculation		

1b. Pollutant ID NOx	2b. Ozone Season Emissions (lb/day) 0	3b. Emissions Method Code
4b. Emissions Calculation		

Shaded areas are for DER use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE	
APIS ID	30	ORL	31	0029	05
				INPUT	<input type="checkbox"/>

SOURCE OPERATION REPORT - PAGE 1 & 2 (SOURCE REPORT 5 OF 5)
 FACILITY NAME: VERO BEACH POWER PLANT

SOURCE INFORMATION (AIR030)

1. Source Description		
60 MW COMBINED CYCLE GAS TURBINE		
2. DEP Permit or PPS Number	3. Source APIS ID	4. Source Status
AC31184928 AO31227564	30ORL31002905	A
5. Source Startup Date (MM/DD/YY)		6. Source Shutdown Date (DD/MM/YY)

SOURCE EMISSION POINT/CONTROL INFORMATION (AIR033)

1. Source Emission Point Type
SINGLE POINT 1
2a. Description of Control Equipment 'a'
LOW NOX COMB. OR SCR SYSTEM.SEE SPECIFIC PERMIT CONDITIONS WATER INJECTION FOR NOx CONTROL
2b. Description of Control Equipment 'b'

SOURCE OPERATING SCHEDULE INFORMATION (AIR050)

1. Operated During Year?	2. Average Operation During Year	hour/day	day/week	3. Total Operation During Year (hour/year)	
y		22.08	5.82	4,238.72	
4. Percent Hours of Operation by Season		DJF	MAM	JJA	SON
		11%	19%	52%	18%

Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE	
APIS ID	30	ORL	31	0029	05
					INPUT <input type="checkbox"/>

SOURCE PROCESS/FUEL INFORMATION (AIR050)

1a. SCC 'a'		2a. Description of Process or Type of Fuel	
20100201		INTERNL COMBUSTION ELECTRIC GENERATN NATURAL GAS TURBINE	
3a. Annual Process or Fuel Usage Rate (SCC Units)			
1,618.547		MILLION CUBIC FEET	
4a. Fuel Average % Sulphur	5a. Fuel Average % Ash	6a. Fuel Heat Content (mmBtu/SCC Units)	
		1028	

1b. SCC 'b'		2b. Description of Process or Type of Fuel	
20100101		INTERNL COMBUSTION ELECTRIC GENERATN DIST.OIL/DIESEL TURBINE	
3b. Annual Process or Fuel Usage Rate (SCC Units)			
53		1000 GALLONS BURNED	
4b. Fuel Average % Sulphur	5b. Fuel Average % Ash	6b. Fuel Heat Content (mmBtu/SCC Units)	
0.15		140.178	

1c. SCC 'c'		2c. Description of Process or Type of Fuel	
3c. Annual Process or Fuel Usage Rate (SCC Units)			
4c. Fuel Average % Sulphur	5c. Fuel Average % Ash	6c. Fuel Heat Content (mmBtu/SCC Units)	

1d. SCC 'd'		2d. Description of Process or Type of Fuel	
3d. Annual Process or Fuel Usage Rate (SCC Units)			
4d. Fuel Average % Sulphur	5d. Fuel Average % Ash	6d. Fuel Heat Content (mmBtu/SCC Units)	

Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE		
APIS ID	30	ORL	31	0029	05	INPUT <input type="checkbox"/>

SOURCE OPERATION REPORT - PAGE 3 & 4 (SOURCE REPORT 5 OF 5)
SOURCE DESCRIPTION: 60 MW COMBINED CYCLE GAS TURBINE

SOURCE EMISSIONS INFORMATION (AIR051)

1a. Pollutant 'a' ID VOLATILE ORGANIC COMPOUNDS	2a. Annual Emissions (ton/year) 20.029	3a. Emissions Method Code 3
4a. Emissions Calculation $(0.024 \text{ Lb/mmbtu} * 1028 \frac{\text{mmbtu}}{\text{mmcf}} * 1618.547 \text{ mmcf}) / 2000 = 19.966 \text{ Tons}$ $(0.017 \text{ Lb/mmbtu} * 140.178 \frac{\text{mmbtu}}{\text{mgal}} * 53 \text{ mgal}) / 2000 = 0.0627 \text{ Tons}$		

1b. Pollutant 'b' ID SULFUR DIOXIDE	2b. Annual Emissions (ton/year) 0.4912	3b. Emissions Method Code 4
4b. Emissions Calculation $(0.6 \text{ Lb/mmcf} * 1618.547 \text{ mmcf}) / 2000 = 0.4856 \text{ Tons}$ $(142 \text{ Lb/mgal} * .0015 * 53 \text{ mgal}) / 2000 = 0.0056 \text{ Tons}$		

1c. Pollutant 'c' ID PARTICULATE MATTER - TOTAL	2c. Annual Emissions (ton/year) 16.196	3c. Emissions Method Code 3
4c. Emissions Calculation $(0.0193 \text{ Lb/mmbtu} * 1028 \frac{\text{mmbtu}}{\text{mmcf}} * 1618.547 \text{ mmcf}) / 2000 = 16.056 \text{ Tons}$ $(0.038 \text{ Lb/mmbtu} * 140.178 \frac{\text{mmbtu}}{\text{mgal}} * 53 \text{ mgal}) / 2000 = 0.1403 \text{ Tons}$		

1d. Pollutant 'd' ID NITROGEN OXIDES	2d. Annual Emissions (ton/year) 368.63	3d. Emissions Method Code 3
4d. Emissions Calculation $(0.44 \text{ Lb/mmbtu} * 1028 \frac{\text{mmbtu}}{\text{mmcf}} * 1618.547 \text{ mmcf}) / 2000 = 366.05 \text{ Tons}$ $(0.698 \text{ Lb/mmbtu} * 140.178 \frac{\text{mmbtu}}{\text{mgal}} * 53 \text{ mgal}) / 2000 = 2.58 \text{ Tons}$		

Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE	INPUT
APIS ID 30	ORL	31	0029	05	<input type="checkbox"/> <input type="checkbox"/>

SOURCE EMISSIONS INFORMATION (Continued)

1e. Pollutant 'e' ID CARBON MONOXIDE	2e. Annual Emissions (ton/year) 91.68	3e. Emissions Method Code 3
4e. Emissions Calculation $(0.11 \text{ Lb/mmbtu} * 1028 \frac{\text{mmbtu}}{\text{mmcf}} * 1618.547 \text{ mmcf}) / 2000 = 91.51 \text{ Tons}$ $(0.048 \text{ Lb/mmbtu} * 140.178 \frac{\text{mmbtu}}{\text{mgal}} * 53 \text{ mgal}) / 2000 = 0.17 \text{ Tons}$		

1f. Pollutant 'f' ID PARTICULATE MATTER - 10 MICRONS OR LESS	2f. Annual Emissions (ton/year) 6.49	3f. Emissions Method Code 3
4f. Emissions Calculation $(0.4 * 0.0193 \text{ Lb/mmbtu} * 1028 \frac{\text{mmbtu}}{\text{mmcf}} * 1618.547 \text{ mmcf}) / 2000 = 6.423 \text{ Tons}$ $(0.48 * 0.038 \text{ Lb/mmbtu} * 140.178 \frac{\text{mmbtu}}{\text{mgal}} * 53 \text{ mgal}) / 2000 = 0.067 \text{ Tons}$		

1g. Pollutant 'g' ID LEAD AND LEAD COMPOUNDS	2g. Annual Emissions (ton/year) 0.0485	3g. Emissions Method Code 3
4g. Emissions Calculation $(5.8 * 10^{-5} \text{ Lb/mmbtu} * 1028 \frac{\text{mmbtu}}{\text{mmcf}} * 1618.547 \text{ mmcf}) / 2000 = 0.0483 \text{ Tons}$ $(5.8 * 10^{-5} \text{ Lb/mmbtu} * 140.178 \frac{\text{mmbtu}}{\text{mgal}} * 53 \text{ mgal}) / 2000 = 0.0002 \text{ Tons}$		

1h. Pollutant 'h' ID 114 (MERCURY)	2h. Annual Emissions (ton/year) 0.0000034	3h. Emissions Method Code 3
4h. Emissions Calculation $(9.1 * 10^{-7} \text{ Lb/mmbtu} * 140.178 \frac{\text{mmbtu}}{\text{mgal}} * 53 \text{ mgal}) / 2000 = 0.0000034 \text{ Tons}$		

5. Source Operation Report Comments

Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE	INPUT	
APIS ID	30	ORL	31	0029	05	<input type="text"/>

SOURCE OPERATION REPORT - PAGE 3 & 4 (SOURCE REPORT 5 OF 5)
 SOURCE DESCRIPTION: 60 MW COMBINED CYCLE GAS TURBINE

SOURCE EMISSIONS INFORMATION (AIR051)

1a. Pollutant 'i' ID i 'i'	2a. Annual Emissions i (ton/year)	3a. Emissions i Method Code
021 (BERYLLIUM)	0.00000122	3
4a. Emissions Calculation i $(3.3 * 10^{-7} \text{ Lb/mmbtu} * 140.178 \frac{\text{mmbtu}}{\text{mgal}} * 53 \text{ mgal}) / 2000 = 0.00000122 \text{ Tons}$		

1b. Pollutant 'j' ID j 'j'	2b. Annual Emissions j (ton/year)	3b. Emissions j Method Code
SAM (SULFURIC ACID MIST)	0.0299	5
4b. Emissions Calculation j $(8.1 * 10^{-3} \text{ Lb/mmbtu} * 140.178 \frac{\text{mmbtu}}{\text{mgal}} * 53 \text{ mgal}) / 2000 = 0.0299 \text{ Tons}$		

1c. Pollutant 'c' ID	2c. Annual Emissions (ton/year)	3c. Emissions Method Code
4c. Emissions Calculation		

1d. Pollutant 'd' ID	2d. Annual Emissions (ton/year)	3d. Emissions Method Code
4d. Emissions Calculation		

Shaded areas are for DEP use.

DISTRICT	OFFICE	COUNTY	FACILITY	SOURCE		
APIS ID	30	ORL	31	0029	05	INPUT <input type="checkbox"/>

SOURCE EMISSIONS INFORMATION (Continued)

1e. Pollutant 'e' ID	2e. Annual Emissions (ton/year)	3e. Emissions Method Code
4e. Emissions Calculation		

1f. Pollutant 'f' ID	2f. Annual Emissions (ton/year)	3f. Emissions Method Code
4f. Emissions Calculation		

1g. Pollutant 'g' ID	2g. Annual Emissions (ton/year)	3g. Emissions Method Code
4g. Emissions Calculation		

1h. Pollutant 'h' ID	2h. Annual Emissions (ton/year)	3h. Emissions Method Code
4h. Emissions Calculation		

5. Source Operation Report Comments		
-------------------------------------	--	--

Shaded areas are for DEP use.

Unit 5

CEM

SUMMARIES

5/93 - 8/94

MONTHLY : MAY 1993

	O2	SO2	NOx	Flow	SO2btu	NOxbtu
DY 01-99.0	-99.0	-99.0	-99.0	0.0	-0.024	-0.017
DY 02-99.0	-99.0	-99.0	-99.0	0.0	-0.024	-0.017
DY 03-99.0	-99.0	-99.0	-99.0	46.2	-0.024	-0.017
DY 04-99.0	-99.0	-99.0	-99.0	? 118.2	-0.024	-0.017
DY 05 15.0	0.4	13.6	? 119.5	0.002	0.050	
DY 06 15.6	0.1	14.8	99.1	0.000	0.060	
DY 07 15.8	0.1	16.8	? 102.9	0.000	0.071	
DY 08 15.1	0.1	19.5	? 111	0.000	0.073	
DY 09 15.1	0.1	19.7	? 109.8	0.000	0.073	
DY 10 15.2	0.2	9.5	? 114	0.001	0.038	
DY 11 15.4	0.2	13.9	? 110.2	0.001	0.054	
DY 12 15.2	0.1	20.7	? 113.4	0.000	0.078	
DY 13 15.1	0.1	21.6	? 114.4	0.000	0.080	
DY 14 15.1	0.1	21.3	? 115	0.000	0.079	
DY 15 14.3	0.1	20.7	? 109.4	0.000	0.068	
DY 16 15.2	0.1	19.7	? 110.8	0.000	0.075	
DY 17 14.3	0.1	20.4	? 109.2	0.000	0.067	
DY 18 15.1	0.1	20.7	? 114.9	0.000	0.077	
DY 19 15.1	0.0	20.4	? 113.7	0.000	0.076	
DY 20 14.3	0.1	19.7	? 107.6	0.000	0.064	
DY 21 15.0	0.1	22.3	? 118.2	0.000	0.082	
DY 22 15.0	0.1	22.2	? 116.3	0.000	0.081	
DY 23 15.1	0.1	22.4	? 116	0.000	0.083	
DY 24 13.9	38.0	24.3	? 114.3	0.184	0.075	
DY 25 15.1	0.2	24.5	? 115.4	0.001	0.091	
DY 26 15.1	0.4	36.5	? 114.2	0.002	0.136	
DY 27 15.1	0.1	38.6	? 113.6	0.000	0.144	
DY 28 15.0	0.2	28.9	? 115.2	0.001	0.099	
DY 29 15.1	0.1	23.1	? 115	0.000	0.086	
DY 30 14.9	0.1	21.9	? 115.1	0.000	0.079	
DY 31 14.3	0.1	19.8	? 107.4	0.000	0.064	

MONTHLY : JUNE 1993

	02	SO2	NOx	Flow	SO2btu	NOxbtu
DY 01	15.0	0.1	21.3 ?	113	0.000	0.078
DY 02	16.7	0.0	16.2 ?	110.6	0.000	0.083
DY 03	15.1	0.1	21.1 ?	114.6	0.000	0.079
DY 04	15.1	0.1	21.1 ?	113.7	0.000	0.079
DY 05	15.1	0.1	20.9 ?	114.2	0.000	0.078
DY 06	15.0	0.1	20.9 ?	114.6	0.000	0.076
DY 07	15.0	0.1	20.8 ?	112.9	0.000	0.076
DY 08	15.1	0.1	20.7 ?	113.1	0.000	0.077
DY 09	15.1	0.0	20.7 ?	113	0.000	0.077
DY 10	15.2	0.4	20.7 ?	112.2	0.002	0.078
DY 11	15.1	0.1	20.7 ?	113.3	0.000	0.077
DY 12	16.5	0.0	17.4 ?	108.2	0.000	0.070
DY 13	15.3	0.0	18.6 ?	109.5	0.000	0.072
DY 14	15.1	0.1	19.7 ?	110	0.000	0.073
DY 15	15.4	0.1	17.9 ?	108.8	0.000	0.070
DY 16	14.7	0.0	16.8 ?	103.4	0.000	0.058
DY 17	15.4	0.2	17.7 ?	108.2	0.001	0.069
DY 18	17.0	0.1	13.8 ?	105.7	0.000	0.076
DY 19	15.1	0.1	20.3 ?	113.8	0.000	0.076
DY 20	15.3	0.1	18.2 ?	109.6	0.000	0.070
DY 21	15.3	0.0	17.3 ?	109.3	0.000	0.067
DY 22	15.5	0.0	15.5 ?	107.5	0.000	0.062
DY 23	15.2	0.1	16.1 ?	108.6	0.000	0.061
DY 24	15.1	0.0	16.6 ?	109.3	0.000	0.062
DY 25	18.1	0.1	16.9 ?	111.2	0.000	0.063
DY 26	15.2	0.1	16.1 ?	109	0.000	0.061
DY 27	15.2	0.1	16.2 ?	108.7	0.000	0.061
DY 28	15.2	0.1	16.1 ?	109.1	0.000	0.061
DY 29	15.3	0.1	15.8 ?	109.2	0.000	0.061
DY 30	15.3	0.0	15.7 ?	107.9	0.000	0.060

MONTHLY : July, 1993

	O2	SO2	NOx	Flow	SO2btu	NOx _x btu
DY 01	15.0	0.0	18.2 ?	108.6	0.000	0.067
DY 02	15.3	0.1	16.2 ?	107	0.000	0.062
DY 03	15.5	0.0	14.6 ?	105.4	0.000	0.058
DY 04	15.3	0.0	15.1 ?	107.5	0.000	0.058
DY 05	15.4	0.0	13.1 ?	106.6	0.000	0.051
DY 06	15.4	0.1	12.4 ?	107.6	0.000	0.049
DY 07	15.4	0.1	12.3 ?	106.7	0.000	0.048
DY 08	15.4	0.1	12.7 ?	106.8	0.000	0.050
DY 09	15.5	0.1	19.3 ?	107.3	0.000	0.077
DY 10	15.4	0.2	12.9 ?	107.1	0.001	0.050
DY 11	15.5	0.1	11.5 ?	103	0.000	0.046
DY 12	15.3	0.0	13.0 ?	103.9	0.000	0.050
DY 13	15.5	0.1	12.0 ?	102.4	0.000	0.048
DY 14	15.2	0.0	14.6 ?	108.8	0.000	0.055
DY 15	15.3	0.0	13.8 ?	107.1	0.000	0.052
DY 16	15.3	0.2	39.0 ?	106.8	0.001	0.151
DY 17	15.2	0.1	15.7 ?	108.2	0.000	0.059
DY 18	15.2	0.1	15.2 ?	107.1	0.000	0.057
DY 19	15.2	0.0	14.5 ?	106	0.000	0.055
DY 20	15.2	0.1	14.2 ?	104.7	0.000	0.054
DY 21	15.4	0.0	13.5 ?	103.9	0.000	0.053
DY 22	15.4	0.0	13.8 ?	103.4	0.000	0.054
DY 23	15.2	0.1	14.7 ?	105.8	0.000	0.056
DY 24	15.4	0.1	13.5 ?	104.6	0.000	0.053
DY 25	15.4	0.1	13.9 ?	105.3	0.000	0.054
DY 26	17.6	1.3	10.0 ?	106.2	0.011	0.065
DY 27	16.6	0.2	17.3 ?	105.3	0.001	0.087
DY 28	16.2	0.9	21.6 ?	101.1	0.005	0.099
DY 29	14.4	0.0	16.3 ?	103.3	0.000	0.054
DY 30	15.3	0.1	16.9 ?	109.1	0.000	0.065
DY 31	15.5	0.0	15.1 ?	107.3	0.000	0.060

UNIT #5

AUGUST 1-31 93 UNIT # 5

MONTHLY :

	O2	SO2	NOx	Flow	SO2btu	NOxbtu
DY 01	15.0	0.0	18.2 ?	113.4	0.000	0.087
DY 02	15.3	0.1	15.9 ?	108.3	0.000	0.061
DY 03	15.2	0.1	16.2 ?	108.7	0.000	0.061
DY 04	15.1	0.0	16.0 ?	109.2	0.000	0.059
DY 05	15.4	0.1	13.9 ?	107	0.000	0.054
DY 06	15.5	0.1	14.6 ?	107.8	0.000	0.058
DY 07	15.5	0.1	14.5 ?	108.8	0.000	0.058
DY 08	15.5	0.1	13.8 ?	108.4	0.000	0.055
DY 09	15.8	0.3	13.0 ?	105.8	0.001	0.053
DY 10	15.8	0.1	11.2 ?	103.8	0.000	0.047
DY 11	15.4	0.1	14.2 ?	108.8	0.000	0.056
DY 12	15.3	0.1	14.5 ?	110.2	0.000	0.056
DY 13	15.3	0.1	14.0 ?	108.9	0.000	0.054
DY 14	15.3	0.1	14.8 ?	108.7	0.000	0.056
DY 15	15.2	0.1	14.9 ?	108.1	0.000	0.056
DY 16	15.3	0.2	13.8 ?	108.4	0.001	0.053
DY 17	15.3	0.3	14.0 ?	108.3	0.001	0.054
DY 18	15.3	0.0	14.2 ?	108.3	0.000	0.055
DY 19	15.3	0.1	14.0 ?	107.4	0.000	0.054
DY 20	15.3	0.0	13.9 ?	107.3	0.000	0.053
DY 21	15.3	0.2	14.3 ?	107.7	0.001	0.055
DY 22	15.4	0.1	13.8 ?	106.5	0.000	0.054
DY 23	15.4	0.0	13.3 ?	105.8	0.000	0.052
DY 24	15.3	0.1	14.3 ?	107.1	0.000	0.055
DY 25	15.3	0.2	14.0 ?	107.6	0.001	0.054
DY 26	15.1	0.3	15.8 ?	110.8	0.001	0.059
DY 27	15.4	0.1	14.0 ?	106.9	0.000	0.055
DY 28	15.3	0.1	13.8 ?	105.8	0.000	0.053
DY 29	15.3	0.1	13.9 ?	106.8	0.000	0.053
DY 30	15.0	0.1	16.1 ?	110.4	0.000	0.059
DY 31	18.0	0.1	17.0 ?	110.5	0.000	0.062

MONTHLY : SEPT, 1993

	O2	SO2	NOx	Flow	SO2btu	NOxbtu
DY 01	18.1	0.1	7.1 ?	111.2	0.001	0.055
DY 02	16.6	0.1	11.8 ?	103.3	0.000	0.059
DY 03	15.5	0.0	15.0 ?	105.6	0.000	0.060
DY 04	15.6	0.1	13.7 ?	102.2	0.000	0.056
DY 05	15.6	0.1	14.2 ?	103.9	0.000	0.057
DY 06	14.6	0.0	14.6 ?	102.1	0.000	0.050
DY 07	15.4	0.0	14.5 ?	106.7	0.000	0.057
DY 08	17.1	0.1	9.8	89.5	0.000	0.058
DY 09	16.6	0.0	14.1 ?	105.8	0.000	0.071
DY 10	14.6	0.0	14.3 ?	101.7	0.000	0.049
DY 11	15.6	0.1	14.0 ?	106.5	0.000	0.057
DY 12	15.7	0.0	14.0 ?	106.9	0.000	0.058
DY 13	15.4	0.1	15.5 ?	108.1	0.000	0.061
DY 14	15.5	0.4	13.2	87.6	0.002	0.053
DY 15	15.5	0.2	15.1 ?	108.6	0.001	0.060
DY 16	15.2	0.1	16.2 ?	109.2	0.000	0.061
DY 17	15.8	0.0	14.4 ?	102.6	0.000	0.061
DY 18	15.2	0.1	16.8 ?	111.1	0.000	0.064
DY 19	14.6	0.1	14.6 ?	102.5	0.000	0.050
DY 20	15.2	0.1	16.5 ?	109.2	0.000	0.062
DY 21	15.3	0.1	16.2 ?	108.5	0.000	0.062
DY 22	15.6	0.1	14.6 ?	107	0.000	0.059
DY 23	15.8	0.1	14.3 ?	105	0.000	0.060
DY 24	15.7	0.1	14.6 ?	105.9	0.000	0.061
DY 25	15.7	0.1	13.8 ?	104.9	0.000	0.057
DY 26	15.6	0.0	13.8 ?	104.6	0.000	0.056
DY 27	15.8	0.1	12.9 ?	102.4	0.000	0.054
DY 28	15.7	0.1	20.1 ?	107.1	0.000	0.084
DY 29	14.8	0.0	19.9 ?	100.4	0.000	0.070
DY 30	15.7	0.3	25.6 ?	107.1	0.001	0.107

MONTHLY : OCTOBER, 1993

	O2	SO2	NOx	Flow	SO2btu	NOxbtu
DY 01	16.7	0.1	15.7	85.1	0.000	0.081
DY 02	20.6	0.3	0.7	2.0	0.030	0.050
DY 03	20.8	0.6	0.0	3.8	0.181	0.000
DY 04	20.8	0.9	0.1	4.1	0.271	0.021
DY 05	20.8	0.8	0.0	6.2	0.241	0.000
DY 08	20.7	0.8	0.1	4.5	0.120	0.010
DY 07	20.8	2.7	0.3	5.0	0.815	0.065
DY 08	20.8	5.0	0.9	5.2	1.510	0.195
DY 09	20.8	1.5	0.3	5.5	0.453	0.065
DY 10	20.7	0.5	0.0	6.1	0.075	0.000
DY 11	20.8	0.5	0.1	5.6	0.151	0.021
DY 12	20.8	0.4	1.1	6.3	0.120	0.239
DY 13	20.8	0.2	0.5	5.6	0.060	0.108
DY 14	20.7	2.5	0.8	5.4	0.377	0.088
DY 15	20.7	3.8	0.6	5.8	0.574	0.065
DY 16	20.8	1.6	0.1	5.3	0.483	0.021
DY 17	20.7	0.6	0.3	5.6	0.090	0.032
DY 18	20.8	0.7	0.1	6.2	0.211	0.021
DY 19	20.7	0.8	0.0	6.0	0.120	0.000
DY 20	20.8	0.6	0.1	5.9	0.181	0.021
DY 21	20.8	0.6	0.0	6.1	0.181	0.000
DY 22	19.7	0.6	0.0	5.4	0.015	0.000
DY 23	20.7	0.4	0.0	7.0	0.080	0.000
DY 24	20.7	0.3	0.0	5.1	0.045	0.000
DY 25	20.8	0.6	0.2	4.9	0.181	0.043
DY 26	20.8	2.6	0.7	5.5	0.785	0.152
DY 27	20.8	1.1	0.2	5.3	0.332	0.043
DY 28	20.7	0.4	0.1	5.9	0.060	0.010
DY 29	20.8	0.3	0.0	4.8	0.090	0.000
DY 30	20.7	0.3	0.0	2.2	0.045	0.000
DY 31	19.7	0.3	0.0	4.7	0.007	0.000

MONTHLY : NOVEMBER, 1993

	02	SO2	NOx	Flow	SO2btu	NOxbtu
DY 01	20.8	0.2	0.0	5.6	0.060	0.000
DY 02	20.7	0.1	0.1	5.4	0.015	0.010
DY 03	20.8	0.0	0.2	5.6	0.000	0.043
DY 04	19.7	0.3	0.0	4.8	0.007	0.000
DY 05	20.8	0.1	0.0	5.9	0.030	0.000
DY 06	20.8	0.2	1.9	5.1	0.080	0.412
DY 07	20.8	0.2	2.3	4.7	0.060	0.499
DY 08	20.7	0.1	0.6	4.8	0.015	0.065
DY 09	20.8	0.2	0.0	5.0	0.060	0.000
DY 10	20.8	0.3	0.0	4.9	0.090	0.000
DY 11	20.7	0.3	0.3	6.9	0.045	0.032
DY 12	20.8	0.1	0.1	5.4	0.030	0.021
DY 13	20.8	0.1	0.1	6.1	0.030	0.021
DY 14	20.7	0.4	0.0	5.5	0.060	0.000
DY 15	20.8	0.5	0.0	2.4	0.151	0.000
DY 16	20.8	0.2	0.0	0.0	0.060	0.000
DY 17	20.7	3.8	0.6	0.0	0.574	0.065
DY 18	20.7	5.3	1.0	0.0	0.800	0.108
DY 19	20.8	4.9	0.6	0.0	1.480	0.130
DY 20	20.8	4.1	1.1	0.0	1.238	0.239
DY 21	20.8	3.9	0.9	0.0	1.178	0.195
DY 22	20.6	5.9	1.9	0.0	0.594	0.137
DY 23	20.6	4.2	1.1	0.0	0.423	0.079
DY 24	20.4	0.0	1.6	0.0	0.000	0.069
DY 25	19.4	4.1	0.8	0.0	0.082	0.011
DY 26	20.6	4.9	0.4	0.0	0.493	0.028
DY 27	20.6	4.5	0.6	0.0	0.453	0.043
DY 28	20.7	4.3	0.7	0.0	0.649	0.076
DY 29	20.8	2.5	0.8	0.0	0.755	0.173
DY 30	20.7	1.3	1.2	0.0	0.198	0.130

MONTHLY : **DECEMBER 1993**

	02	SO2	NOx	Flow	SO2btu	NOxbtu
DY 01	20.7	1.8	1.2	0.0	0.271	0.130
DY 02	20.7	2.8	0.7	0.0	0.423	0.076
DY 03	20.7	2.4	1.4	0.0	0.362	0.152
DY 04	20.7	3.1	1.8	0.0	0.468	0.195
DY 05	19.5	3.0	1.4	0.0	0.064	0.021
DY 06	20.8	2.2	0.7	0.0	0.664	0.152
DY 07	17.9	0.6	13.2	0.0	0.006	0.095
DY 08	18.1	0.1	18.1	0.0	0.000	0.072
DY 09	16.1	0.1	18.4	0.0	0.000	0.083
DY 10	17.9	0.0	10.1	0.0	0.000	0.073
DY 11	20.5	3.0	0.8	0.0	0.226	0.043
DY 12	17.4	1.0	14.3	0.0	0.008	0.088
DY 13	18.5	0.0	8.9	0.0	0.000	0.080
DY 14	20.6	1.8	0.9	0.0	0.181	0.065
DY 15	20.8	3.0	0.5	0.0	0.906	0.108
DY 16	17.4	0.9	8.9	0.0	0.007	0.042
DY 17	17.7	0.0	8.9	0.0	0.000	0.060
DY 18	20.5	3.0	1.0	0.0	0.226	0.054
DY 19	20.7	3.8	0.7	0.0	0.574	0.078
DY 20	17.0	1.2	7.9	0.0	0.009	0.044
DY 21	17.0	1.3	7.9	0.0	0.010	0.044
DY 22	20.8	3.4	0.5	0.0	1.027	0.108
DY 23	20.8	2.5	0.9	0.0	0.755	0.195
DY 24	20.7	2.0	0.6	0.0	0.302	0.065
DY 25	20.7	1.2	0.7	0.0	0.181	0.078
DY 26	20.8	0.9	0.5	0.0	0.090	0.036
DY 27	20.6	1.0	0.6	0.0	0.100	0.043
DY 28	20.6	0.7	0.4	0.0	0.070	0.028
DY 29	17.0	1.2	7.9	0.0	0.009	0.044
DY 30	20.7	2.1	0.4	0.0	0.317	0.043
DY 31	-99.0	-99.0	-99.0	-99.0	-0.024	-0.017

MONTHLY : JANUARY 1994

	O2	SO2	NOx	Flow	SO2btu	NOxbtu
DY 01	20.7	2.8	0.4	0.0	0.423	0.043
DY 02	19.6	3.2	0.2	0.0	0.074	0.003
DY 03	19.5	1.3	3.2	0.0	0.028	0.049
DY 04	19.1	0.5	8.7	0.0	0.008	0.105
DY 05	18.3	0.0	5.1	0.0	0.000	0.042
DY 06	20.4	1.2	1.4	0.0	0.072	0.060
DY 07	20.7	1.8	0.9	0.0	0.271	0.097
DY 08	19.4	2.0	1.4	0.0	0.040	0.020
DY 09	20.4	1.5	1.8	0.0	0.090	0.078
DY 10	16.8	1.3	2.5	0.0	0.009	0.013
DY 11	19.0	0.5	1.9	0.0	0.007	0.021
DY 12	18.1	1.0	3.7	0.0	0.010	0.028
DY 13	15.3	0.0	7.9	0.0	0.000	0.030
DY 14	15.4	0.0	10.9	0.0	0.000	0.043
DY 15	15.3	0.0	8.2	0.0	0.000	0.031
DY 16	15.4	0.1	6.9	0.0	0.000	0.027
DY 17	15.9	0.2	4.8	0.0	0.001	0.020
DY 18	16.5	0.1	6.9	0.0	0.000	0.034
DY 19	15.4	0.1	9.9	0.0	0.000	0.039
DY 20	15.3	0.0	6.5	0.0	0.000	0.025
DY 21	15.4	0.0	5.3	0.0	0.000	0.020
DY 22	15.4	0.0	4.9	0.0	0.000	0.019
DY 23	15.4	0.0	2.8	0.0	0.000	0.011
DY 24	15.5	0.1	6.2	0.0	0.000	0.024
DY 25	15.4	0.1	9.3	0.0	0.000	0.036
DY 26	15.3	0.0	9.2	0.0	0.000	0.035
DY 27	15.3	0.1	8.4	0.0	0.000	0.032
DY 28	18.5	0.5	4.5	0.0	0.006	0.040
DY 29	20.4	0.5	2.5	0.0	0.030	0.108
DY 30	20.4	0.9	3.4	0.0	0.054	0.147
DY 31	16.9	0.3	9.1	0.0	0.002	0.049

MONTHLY : *FEBRUARY, 1994*

	O2	SO2	NOx	Flow	SO2btu	NOxibtu
DY 01	15.7	0.1	10.0	0.0	0.000	0.041
DY 02	15.4	0.0	4.9	0.0	0.000	0.019
DY 03	15.4	0.0	2.4	0.0	0.000	0.009
DY 04	16.0	0.1	5.8	0.0	0.000	0.025
DY 05	15.3	0.0	2.9	0.0	0.000	0.011
DY 06	14.5	0.1	6.2	0.0	0.000	0.021
DY 07	15.3	0.0	5.9	0.0	0.000	0.022
DY 08	15.3	0.1	6.5	0.0	0.000	0.025
DY 09	15.3	0.1	65.3	0.0	0.000	0.253
DY 10	15.3	1.6	6.7	0.0	0.008	0.026
DY 11	15.4	1.4	6.3	0.0	0.007	0.024
DY 12	15.3	0.1	4.7	0.0	0.000	0.018
DY 13	15.3	0.8	4.5	0.0	0.004	0.017
DY 14	15.4	0.1	2.7	0.0	0.000	0.010
DY 15	16.3	0.1	7.3	0.0	0.000	0.034
DY 16	15.8	0.0	8.6	0.0	0.000	0.036
DY 17	15.4	0.0	8.6	0.0	0.000	0.033
DY 18	15.3	0.0	8.7	0.0	0.000	0.033
DY 19	16.5	0.1	8.1 ?	142.4	0.000	0.040
DY 20	15.3	0.1	7.2	0.0	0.000	0.027
DY 21	15.4	0.1	7.3	0.0	0.000	0.028
DY 22	15.4	0.1	7.0	0.0	0.000	0.027
DY 23	15.4	0.1	6.8	0.0	0.000	0.026
DY 24	15.4	0.1	10.5	0.0	0.000	0.041
DY 25	14.5	0.1	12.6	0.0	0.000	0.042
DY 26	15.4	0.0	13.1	0.0	0.000	0.051
DY 27	15.3	0.0	9.2	0.0	0.000	0.035
DY 28	15.3	0.0	9.2	0.0	0.000	0.035

17 MARCH (125)
 MONTHLY : ~~FEBRUARY~~, 1994

	O2	SO2	NOx	Flow	SO2btu	NOx _{btu}
DY 01	15.3	0.1	8.5	0.0	0.000	0.032
DY 02	15.3	0.0	11.1	0.0	0.000	0.043
DY 03	15.3	0.1	12.0	0.0	0.000	0.046
DY 04	15.3	0.1	11.0	0.0	0.000	0.042
DY 05	15.3	0.1	9.7	0.0	0.000	0.037
DY 06	15.3	0.1	7.6	0.0	0.000	0.029
DY 07	15.4	0.1	7.8	0.0	0.000	0.030
DY 08	15.4	0.0	7.3	0.0	0.000	0.028
DY 09	15.3	0.1	7.2	0.0	0.000	0.027
DY 10	15.3	0.0	7.3	0.0	0.000	0.028
DY 11	15.4	0.0	9.3	0.0	0.000	0.036
DY 12	15.4	0.1	6.3	0.0	0.000	0.024
DY 13	15.3	0.0	6.6	0.0	0.000	0.025
DY 14	14.5	0.0	7.8	0.0	0.000	0.026
DY 15	15.3	0.1	9.8	0.0	0.000	0.038
DY 16	15.3	0.1	8.9	0.0	0.000	0.034
DY 17	15.4	0.1	9.6	0.0	0.000	0.037
DY 18	15.4	0.0	9.0	0.0	0.000	0.035
DY 19	15.4	0.0	6.8	0.0	0.000	0.026
DY 20	15.4	0.1	6.1	0.0	0.000	0.024
DY 21	15.4	0.0	7.6	0.0	0.000	0.030
DY 22	15.3	0.1	8.3	0.0	0.000	0.032
DY 23	15.4	0.1	6.8	0.0	0.000	0.026
DY 24	15.3	0.0	6.0	0.0	0.000	0.023
DY 25	15.3	0.1	6.4	0.0	0.000	0.024
DY 26	15.3	0.1	6.1	0.0	0.000	0.023
DY 27	15.4	0.0	5.7	0.0	0.000	0.022
DY 28	15.3	0.0	5.1	0.0	0.000	0.019
DY 29	15.3	0.1	6.8	0.0	0.000	0.026
DY 30	15.4	0.0	10.1	0.0	0.000	0.039
DY 31	15.4	0.0	10.0	0.0	0.000	0.039

MONTHLY : *APRIL 1994*

	O2	SO2	NOx	Flow	SO2btu	NOxbtu
DY 01	14.6	0.1	7.3	0.0	0.000	0.025
DY 02	15.4	0.1	16.9	0.0	0.000	0.066
DY 03	15.3	0.0	6.8	0.0	0.000	0.026
DY 04	15.3	0.0	7.7	0.0	0.000	0.029
DY 05	15.3	0.0	7.2	0.0	0.000	0.027
DY 06	16.6	0.0	5.8	0.0	0.000	0.029
DY 07	16.9	0.0	5.6	0.0	0.000	0.030
DY 08	15.4	0.0	5.4	0.0	0.000	0.021
DY 09	15.4	0.0	6.9	0.0	0.000	0.027
DY 10	15.6	0.2	7.0	0.0	0.001	0.028
DY 11	14.5	0.0	5.6	0.0	0.000	0.019
DY 12	15.4	0.0	6.6	0.0	0.000	0.026
DY 13	15.4	0.0	5.3	0.0	0.000	0.020
DY 14	15.3	0.0	4.8	0.0	0.000	0.018
DY 15	16.0	0.0	7.2	0.0	0.000	0.031
DY 16	20.7	3.1	0.9	0.0	0.468	0.097
DY 17	18.5	3.7	1.2	0.0	0.046	0.010
DY 18	20.7	4.1	0.6	0.0	0.619	0.065
DY 19	20.7	3.8	0.9	0.0	0.574	0.097
DY 20	20.7	2.1	1.3	0.0	0.317	0.141
DY 21	20.8	0.2	0.7	0.0	0.060	0.152
DY 22	20.7	0.2	0.0	0.0	0.030	0.000
DY 23	20.8	0.1	0.4	0.0	0.030	0.086
DY 24	20.8	0.1	0.1	0.0	0.030	0.021
DY 25	20.7	0.1	0.8	0.0	0.015	0.086
DY 26	20.8	0.1	1.1	0.0	0.030	0.239
DY 27	20.8	0.1	0.7	0.0	0.030	0.152
DY 28	20.7	0.1	0.2	0.0	0.015	0.021
DY 29	20.8	0.1	0.1	0.0	0.030	0.021
DY 30	18.5	0.1	2.1	0.0	0.002	0.032

MONTHLY : *MAY, 1994*

	O2	SO2	NOx	Flow	SO2btu	NOxbtu
DY 01	19.7	0.1	0.0	0.0	0.002	0.000
DY 02	20.7	0.1	0.1	0.0	0.015	0.010
DY 03	19.7	0.1	0.4	0.0	0.002	0.007
JY 04	20.7	0.1	0.3	0.0	0.015	0.032
DY 05	20.4	0.2	0.3	0.0	0.012	0.013
DY 06	15.3	0.1	3.9	0.0	0.000	0.015
DY 07	15.4	0.1	3.6	0.0	0.000	0.014
DY 08	15.3	0.1	3.1	0.0	0.000	0.012
DY 09	17.4	0.1	1.4	0.0	0.000	0.008
DY 10	17.3	0.1	3.2	0.0	0.000	0.019
DY 11	15.8	0.2	2.9	0.0	0.001	0.012
DY 12	17.0	0.2	3.5	0.0	0.001	0.019
DY 13	16.0	0.1	3.2	0.0	0.000	0.014
DY 14	20.8	0.2	0.0	0.0	0.060	0.000
DY 15	17.3	0.2	4.2	0.0	0.001	0.025
DY 16	15.3	0.2	2.9	0.0	0.001	0.011
DY 17	15.3	0.2	2.6	0.0	0.001	0.010
DY 18	15.4	0.6	3.0	0.0	0.003	0.011
DY 19	15.4	0.1	4.3	0.0	0.000	0.016
DY 20	14.8	0.1	2.5	0.0	0.000	0.008
DY 21	15.4	0.1	0.7	0.0	0.000	0.002
DY 22	15.4	0.1	2.9	0.0	0.000	0.011
DY 23	15.4	0.1	3.5	0.0	0.000	0.013
DY 24	20.7	0.1	0.1	0.0	0.015	0.010
DY 25	20.7	0.3	0.0	0.0	0.045	0.000
DY 26	17.2	0.1	5.1	0.0	0.000	0.029
DY 27	15.3	0.1	7.2	0.0	0.000	0.027
DY 28	15.3	0.1	7.1	0.0	0.000	0.027
DY 29	15.2	0.1	4.7	0.0	0.000	0.017
JY 30	15.3	0.1	4.7	0.0	0.000	0.018
DY 31	15.3	0.0	5.8	0.0	0.000	0.022

MONTHLY : *JUNE, 1994* *UNIT 5*

	02	SO2	NOx	Flow	SO2btu	NOxbtu
DY 01	15.3	0.0	4.3	0.0	0.000	0.016
DY 02	15.3	0.3	4.9	0.0	0.001	0.019
DY 03	15.3	0.1	4.3	0.0	0.000	0.016
DY 04	15.3	0.2	4.9	0.0	0.001	0.019
DY 05	15.3	0.1	4.1	0.0	0.000	0.015
DY 06	15.3	0.2	4.6	0.0	0.001	0.017
DY 07	15.3	0.1	4.4	0.0	0.000	0.017
DY 08	15.3	0.2	5.3	0.0	0.001	0.020
DY 09	15.3	0.2	5.5	0.0	0.001	0.021
DY 10	15.3	0.1	5.0	0.0	0.000	0.019
DY 11	16.4	0.1	4.0	0.0	0.000	0.015
DY 12	15.5	0.1	3.8	0.0	0.000	0.015
DY 13	15.4	0.0	4.4	0.0	0.000	0.017
DY 14	15.6	0.1	6.1	0.0	0.000	0.025
DY 15	15.4	0.1	5.8	0.0	0.000	0.022
DY 16	15.4	0.1	4.0	0.0	0.000	0.015
DY 17	15.5	0.1	4.7	0.0	0.000	0.018
DY 18	15.3	0.1	3.7	0.0	0.000	0.014
DY 19	15.3	0.1	2.9	0.0	0.000	0.011
DY 20	15.3	0.2	2.0	0.0	0.001	0.007
DY 21	14.6	0.1	4.5	0.0	0.000	0.015
DY 22	15.3	1.4	6.5	0.0	0.007	0.025
DY 23	15.3	0.1	4.4	0.0	0.000	0.017
DY 24	15.3	0.2	4.8	0.0	0.001	0.018
DY 25	15.4	0.1	4.1	0.0	0.000	0.016
DY 26	15.3	0.1	4.3	0.0	0.000	0.016
DY 27	15.3	0.1	4.3	0.0	0.000	0.016
DY 28	16.5	0.1	3.6	0.0	0.000	0.017
DY 29	18.1	0.1	2.4	0.0	0.001	0.018
DY 30	15.3	0.1	4.3	0.0	0.000	0.016

MONTHLY : *JULY, 1994*

	O2	SO2	NOx	Flow	SO2btu	NOxibtu
DY 01	15.2	0.2	4.9	0.0	0.001	0.018
DY 02	15.4	0.1	4.5	0.0	0.000	0.017
DY 03	15.3	0.1	4.6	0.0	0.000	0.017
DY 04	15.3	0.0	3.9	0.0	0.000	0.015
DY 05	15.4	0.3	5.9	0.0	0.001	0.023
DY 06	15.4	1.0	7.3	0.0	0.005	0.028
DY 07	15.4	0.2	9.1	0.0	0.001	0.035
DY 08	15.3	0.0	7.0	0.0	0.000	0.027
DY 09	15.3	0.1	5.5	0.0	0.000	0.021
DY 10	19.5	0.1	0.7	0.0	0.002	0.010
DY 11	20.8	0.0	0.0	0.0	0.000	0.000
DY 12	20.8	0.0	0.7	0.0	0.000	0.152
DY 13	17.9	0.3	5.4	0.0	0.003	0.039
DY 14	15.4	0.0	5.1	0.0	0.000	0.020
DY 15	15.4	0.0	5.0	0.0	0.000	0.019
DY 16	15.4	0.0	5.0	0.0	0.000	0.019
DY 17	15.4	0.0	5.4	0.0	0.000	0.021
DY 18	15.4	0.0	5.7	0.0	0.000	0.022
DY 19	15.4	0.0	5.6	0.0	0.000	0.022
DY 20	16.0	0.1	5.2	0.0	0.000	0.023
DY 21	15.4	0.5	6.9	0.0	0.002	0.027
DY 22	14.6	0.0	4.9	0.0	0.000	0.018
DY 23	15.4	0.0	4.8	0.0	0.000	0.018
DY 24	15.3	0.0	5.7	0.0	0.000	0.022
DY 25	14.5	0.0	4.6	0.0	0.000	0.015
DY 26	15.6	0.1	5.4	0.0	0.000	0.022
DY 27	15.4	0.0	7.4	0.0	0.000	0.029
DY 28	15.3	0.1	6.7	0.0	0.000	0.026
DY 29	15.4	0.1	6.1	0.0	0.000	0.024
DY 30	15.3	0.0	4.3	0.0	0.000	0.018
DY 31	15.4	0.1	3.9	0.0	0.000	0.015

MONTHLY : *August, 1994*

	O2	SO2	NOx	Flow	SO2btu	NOxbtu
DY 01	15.4	0.1	4.7	0.0	0.000	0.018
DY 02	15.3	0.0	5.8	0.0	0.000	0.022
DY 03	15.3	1.9	7.5	0.0	0.010	0.029
DY 04	15.3	0.1	4.6	0.0	0.000	0.017
DY 05	15.3	0.1	5.3	0.0	0.000	0.020
DY 06	15.3	0.0	3.9	0.0	0.000	0.015
DY 07	14.5	0.0	4.6	0.0	0.000	0.015
DY 08	15.4	0.1	5.3	0.0	0.000	0.020
DY 09	15.3	0.0	4.5	0.0	0.000	0.017
DY 10	15.3	1.3	5.6	0.0	0.007	0.021
DY 11	15.3	0.0	4.6	0.0	0.000	0.017
DY 12	15.4	0.0	4.5	0.0	0.000	0.017
DY 13	15.3	0.0	4.2	0.0	0.000	0.016
DY 14	15.3	0.0	4.2	0.0	0.000	0.016
DY 15	14.5	0.0	3.4	0.0	0.000	0.011
DY 16	15.3	0.1	4.8	0.0	0.000	0.018
DY 17	15.3	0.0	4.5	0.0	0.000	0.017
DY 18	15.4	0.0	5.4	0.0	0.000	0.021
DY 19	15.4	0.0	5.2	0.0	0.000	0.020
DY 20	15.4	0.0	3.2	0.0	0.000	0.012
DY 21	15.3	0.0	3.6	0.0	0.000	0.013
DY 22	15.3	0.0	2.6	0.0	0.000	0.010
DY 23	15.3	0.0	2.3	0.0	0.000	0.008
DY 24	15.5	0.0	1.3	0.0	0.000	0.005
DY 25	14.6	0.2	3.3	0.0	0.000	0.011
DY 26	15.3	0.1	4.0	0.0	0.000	0.015
DY 27	15.4	0.1	3.8	0.0	0.000	0.015
DY 28	15.4	0.1	2.5	0.0	0.000	0.009
DY 29	15.4	0.0	3.1	0.0	0.000	0.012
DY 30	15.4	0.1	5.3	0.0	0.000	0.020
DY 31	15.4	0.1	6.6	0.0	0.000	0.026

ATTACHMENT C

Vero Beach, City of
 ESTIMATED PERFORMANCE - PG6541(B)

LOAD CONDITION	BASE	PEAK	BASE	BASE
FUEL TYPE	METHANE	METHANE	DIST.	DIST.
FUEL LHV - Btu/lb	21515	21515	18550	18550
AMBIENT TEMP. - Deg F.	59	59	59	59
OUTPUT - kW	37540.	40470.	39310.	38350.
HEAT RATE (LHV) - Btu/kWh	11020.	10930.	11570.	11410.
HEAT CONS. (LHV) X10-6 - Btu/h	413.7	442.3	454.8	437.6
EXHAUST FLOW X10-3 - lb/h	1100.0	1100.0	1129.0	1119.0
EXHAUST TEMP - Deg F.	1012.	1071.	1004.	1007.
EXHAUST HEAT X10-6 - Btu/h	268.0	285.6	275.9	272.1
WATER FLOW - lb/h	0.	0.	25070.	15720.
NOX - ppmvd @ 15% O2	25.	60.	42.	65.
NOX AS NO2 - lb/h	42.	107.	80.	120.
SO2 - lb/h	0.1	0.1	122	118

EXHAUST ANALYSIS % VOL.

ARGON	0.	0.90	0.88	0.89
NITROGEN	74.89	74.72	72.76	73.79
OXYGEN	13.89	13.40	12.81	13.25
CARBON DIOXIDE	3.13	3.35	4.38	4.27
WATER	7.19	7.63	9.17	7.80

SITE CONDITIONS

ELEVATION - ft.	0
SITE PRESSURE - psia	14.7
INLET LOSS - in. Water	5.5
EXHAUST LOSS - in. Water	9
RELATIVE HUMIDITY - %	60
APPLICATION -	6A3 AIR-COOLED GENERATOR
COMBUSTION SYSTEM -	DRY LOW NOX I

EMISSION INFORMATION BASED ON GE-RECOMMENDED MEASUREMENT METHODS.
 NOx EMISSIONS ARE CORRECTED TO 15% O2 WITHOUT HEAT RATE CORRECTION AND
 ARE NOT CORRECTED TO ISO REFERENCE CONDITIONS PER 40CFR 60.335(a)(1)(i).
 NOx LEVELS SHOWN WILL BE CONTROLLED BY ALGORITHMS WITHIN THE
 SPEEDTRONIC CONTROL SYSTEM.

DISTILLATE FUEL IS ASSUMED TO HAVE .015% FUEL-BOUND NITROGEN, OR LESS.
 FBN AMOUNTS GREATER THAN .015% WILL ADD TO THE REPORTED NOx VALUE.

ATTACHMENT D

Control Devices: (See Section V, Item 4)

Name and Type (Model & Serial No.)	Contaminant	Efficiency	Range of Particles Size Collected (in microns) (If applicable)	Basis for Efficiency (Section V Item 5)
See Sections 3.8 and 6.0 of the	AAQIA.			

Fuels

Type (Be Specific)	Consumption*		Maximum Heat Input (MMBTU/hr)
	avg/hr	max./hr	
Natural Gas		0.49 MCF/h	446.0
or			
No. 2 Fuel Oil		3,390 gal/h	443.3

*Units: Natural Gas--MCF/hr; Fuel Oils--gallons/hr; Coal, wood, refuse, other--lbs/hr.

Proximate Analysis: Gas: 2,000 gr/MMCF
 Percent Sulfur: Oil: 0.25% by wgt. Percent Ash: Nil (both fuels)
 Density: Gas: 1 lb/23.8 CF
 Oil: 7.05 lb/gal lbs/gal Typical Percent Nitrogen: <0.015%
 Heating Capacity: Gas: 21,515 Btu/lb Gas: 904 Btu/CF
 Oil: 18,550 Btu/gal Oil: 130,800 Btu/gal Btu/gal

Other Fuel Contaminants (which may cause air pollution): Negl.

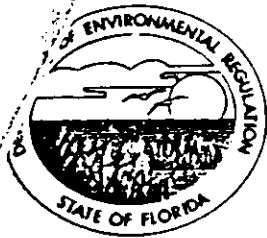
If applicable, indicate the percent of fuel used for space heating.

Fuel Average None Maximum None

Indicate liquid or solid wastes generated and method of disposal.

NA

ATTACHMENT E



Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, Secretary

June 28, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Harry Schindehette
Director of Utilities
Fort Pierce Utilities Authority
Post Office Box 3191
Fort Pierce, Florida 34948

Dear Mr. Schindehette:

Re: 1) AC 56-141460, 31.6 MW Combined Cycle Gas Turbine
2) Letter Dated 11/9/90 from Smallwood to Schindehette

The Department is in receipt of Hopping Boyd Green & Sam's letter dated June 11, 1991, requesting a permit modification to burn fuel oil in existing boilers Nos. 6, 7, and 8. The Department has reviewed your proposal and has determined, based on our discussions at the June 4, 1991, meeting, to amend Specific Condition No. 8 of your permit (AC 56-141460) as requested.

Specific Condition No. 8 is amended to further include the following:

Fort Pierce Utilities Authority (FPUA) shall be permitted to burn residual fuel oil in Units 6, 7, and 8 in order to avoid curtailing electric power service to its customers. FPUA must provide written notification to the Department's Southeast District office within 24 hours after the commencement of oil firing and furnish the following information:

- a. Duration or projected duration of the event.
- b. Quantity of fuel oil burned or projected to be burned.
- c. A description of significant circumstances precipitating the event. The description shall include the following information:
 1. Availability of power for purchase.
 2. Availability of electric transmission capacity relating to power purchases.
 3. Availability of natural gas.
 4. Availability of FPUA's generation resources.

Mr. Harry Schindehette
Page Two
June 28, 1991

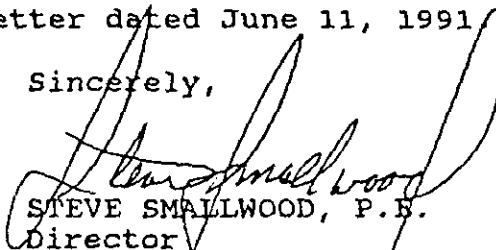
When burning residual fuel oil in Units 6, 7, and 8, the sulfur dioxide (SO₂), particulate matter (PM), and volatile organic compound (VOC) emission limits currently set forth in the permit shall not apply. In lieu of those emission limits, the following emission limits will apply to Units 6, 7, and 8:

	SO ₂ (lb/MMBtu)	PM (lb/MMBtu)	VOC
Unit 6	0.80	n/a	n/a
Unit 7	2.75	0.1	n/a
Unit 8	0.80	0.1	n/a

Attachment to be Incorporated:

Hopping Boyd Green & Sam's letter dated June 11, 1991

Sincerely,



STEVE SMALLWOOD, P.E.
Director
Division of Air Resources
Management

SS/PL/plm

c: Stephanie Brooks, DER
Carol A. Forthman, OGC
Gary C. Smallridge, OGC
Peter Cunningham, HBGS
Gary V. Perko, HBGS

Is your RETURN ADDRESS completed on the reverse side?

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 below the article number. • The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Mr. Mike Siefert City of Vero Beach Municipal Power Plant P. O. Box 1389 Vero Beach, FL 32961		4a. Article Number P 872 563 649	
		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
		7. Date of Delivery 8-1-94	
5. Signature (Addressee) <i>George Young</i>		8. Addressee's Address (Only if requested and fee is paid)	
6. Signature (Agent) <i>[Signature]</i>			

Thank you for using Return Receipt Service.

PS Form 3811, December 1991 *U.S. GPO: 1992-323-402 **DOMESTIC RETURN RECEIPT**

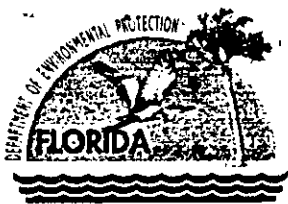
P 872 563 649



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

Sent to	
Mr. Mike Siefert, City of Vero Beach	
Street and No. P. O. Box 1389	
P. O., State and ZIP Code Vero Beach, FL 32961	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	
Mailed: 7-27-94	
Permit: AC31-184928	
PSD-FL-152	

PS Form 3800, JUNE 1991



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

July 27, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Mike Siefert
City of Vero Beach
Municipal Power Plant
Post Office Box 1389
Vero Beach, Florida 32961

Dear Mr. Siefert:

RE: Request to Amend Construction Permit
AC 31-184928, PSD-FL-152
Vero Beach Municipal Power Plant, Unit 5

The Department has received and is reviewing the subject request, dated June 30, 1994. To complete our review of the request, it will be necessary for you to provide us with the following information:

- 1) At what capacity (i.e. load) did you conduct the initial compliance test during January 1994? Please provide the summary page of the compliance test report.
- 2) How will you demonstrate compliance, at any given time, with the #/MMBtu standards in the permit without continuously monitoring/measuring the consumption of fuels (i.e., natural gas and fuel oil) at all rates?
- 3) What have your actual pollutant emissions been for the past five years? Please provide the calculations and any assumptions.
- 4) What parameters change during peak loading versus the compliance test load that require a standard of 60 ppmvd while firing natural gas? If these operating conditions truly justify 60 ppmvd, then, you need to provide the justification and a request to revise the BACT determination.
- 5) Please provide complete details of all changes made to the emission unit that you alluded to in paragraph 2 on page 2 of your June 3, 1994 letter.

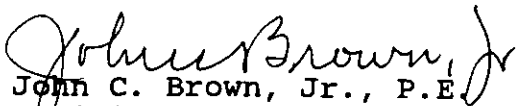
Mr. Mike Siefert
Permit Amendment Request
AC 31-184928, PSD-FL-152
July 27, 1994
Page 2 of 2

6) Provide justification to the request for eliminating the fuel oil "gallons/hour" consumption limit.

7) Please provide a summary of any known delays in providing electrical service within the industry as a result of a facility not being able to obtain an emergency order.

If you have any questions concerning the requested information or questions in general, please call Bruce Mitchell at (904) 488-1344.

Sincerely,


John C. Brown, Jr., P.E.
Administrator
Air Permitting and Standards

JB/CSL/bjb

cc: C. Collins, C.D.
D. Beason, Esq., DEP
J. Harper, EPA
J. Bunyak, NPS
P. Cunningham, Esq., HBG&S
G. Perko, Esq., HBG&S