



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

March 27, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Mike Siefert
Vero Beach Municipal Power Plant
P. O. Box 1389
Vero Beach, Florida 32961

Dear Mr. Siefert:

RE: Amendment to Construction Permit
AC 31-184928A/PSD-FL-152A
City of Vero Beach Municipal Power Plant Unit 5

The Department has reviewed Mr. Gary V. Perko's letter with attachments received December 20, 1994, requesting amendments to the above referenced construction permit. A letter requesting additional information was sent to you on October 20, 1994, but Mr. Perko stated that there would not be any response forthcoming. Since the emissions unit has already been built and initially compliance tested, certain requests for change will not be granted because they are construction related. However, Specific Condition No. 2 directs the Department to establish the appropriate NO_x emission standard upon completion of the initial compliance test. Based on the above, the Department will address the requests in Mr. Perko's letter of December 7, specifically "Attachment A", in the order that they are stated and the Department's response (R) follows:

1. Specific Condition No. 1.: Request was to delete the condition because the permittee has installed dry low-NO_x combustors and conducted compliance tests.

R: The Department will not make any change to the condition because it is a construction issue. The recognition of the installation of "dry low-NO_x combustors" will be addressed in Specific Condition No. 2.

2. Specific Condition No. 2.: Request was to revise the condition to delete any references of SCR and reflect a new Table 1 to replace all of the previous Tables 1 through 4.

R: In a new Table 5, which will replace Tables 1 thru 4, the Department will change the NO_x emission limiting standard, which was confirmed in the initial compliance test, and the associated

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operational parameters that are used to calculate the table's allowable emission limits. The Department will also recognize that the permittee installed "dry low-NO_x combustors".

From: Within one year of the date Unit 5 commences commercial operation, the permittee shall install low NO_x combustors or an SCR system to control NO_x emissions from the unit. If low NO_x combustors are installed, the maximum allowable emissions from Unit 5 shall not exceed the emission limitations listed in Table 2. However, should compliance testing performed in accordance with Specific Condition No. 10 establish, to the satisfaction of the Department, a NO_x emissions rate of 42 ppmvd (at 15% O₂ on a dry basis) or lower, the emission limitations listed in Table 3 shall apply. In the event an SCR system is installed, the emission limitations listed in Table 4 shall apply. If an SCR system is installed, it may be bypassed during simple cycle operation.

To: The Department acknowledges that the permittee installed dry low-NO_x combustors. Based on the compliance test results, the maximum allowable emissions from Unit 5 shall not exceed the emission limitations listed in the new Table 5, which replaces Tables 1 thru 4. In the event a SCR system is required to be installed, the emission limitations shall be established at the time of installation by stack test results and through a revised determination of BACT. If a SCR system is installed, it may be bypassed during simple cycle operation.

3. Specific Condition No. 3.: Request was to delete the condition.

R: The Department will not change the condition because the limitations were established through the federally enforceable BACT determination process pursuant to Rule 62-212.410, F.A.C. However, the Department now references these types of pollutant limitations as Ambient Reference Concentrations (ARC), not Acceptable Ambient Concentrations (AAC).

4. Specific Condition No. 7.: Request was to revise the condition to delete the fuel oil's gallon/hour restriction, to delete the SCR reference, to limit the fuel oil's annual consumption rate to 7.5 million gallons, to take a 25% maximum annual capacity factor while firing fuel oil, and to change and add verbage to the heat input rate part of the condition.

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R: The Department will not delete the gallons/hour limitation on fuel oil because of the combustion relationship to the pollutant formation and the affect on both the short term and annual basis; will agree to the issues related to the SCR, the annual fuel oil consumption rate and the annual capacity factor while firing fuel oil; and, in the last part of the condition, will agree to change the heat input rates, correct the parameters related to "ISO standard day conditions", add the verbage "and lower heating value of the fuel fired", but will not change the term "maximum operation rate" to "Base Load operation rate" because the rate is considered as the permitted/maximum operation rate and not an average or normal rate, which is what Base Load is defined as in 40 CFR 60, Subpart GG.

From: The permitted materials and utilization rates for the combined cycle gas turbine shall not exceed the values as follows:

- Maximum No. 2 fuel oil consumption shall not exceed 3,390 gals/hr.
- Maximum No. 2 fuel oil consumption shall not exceed 7,500,000 gals/yr., unless SCR is installed. If low NO_x burners are installed and compliance testing in accordance with Specific Condition No. 16 establishes a NO_x emission rate of 42 ppmvd (at 15% O₂ on a dry basis) or lower, the limit on No. 2 fuel oil consumption shall be raised to 10,000,000 gals/yr.
- Maximum annual firing using No. 2 fuel oil shall not exceed 25% of the annual capacity factor, unless SCR is installed. If low NO_x combustors are installed and compliance testing in accordance with Specific Condition No. 10 established a NO_x emissions rate of 42 ppmvd (at 15% O₂ on a dry basis) or lower, the annual limit on firing of No. 2 fuel oil shall be raised to 33% of the annual capacity factor.
- Maximum annual simple cycle operation shall not exceed 25% of the annual capacity factor unless low NO_x combustors are installed.
- Maximum sulfur (S) content in the oil shall not exceed 0.25 percent by weight.
- Maximum heat input shall not exceed 446 MMBtu/hr (gas) or 443 MMBtu/hr (oil), based on sea level pressure at 59°F ambient dry bulb temperatures and 60% relative humidity (ISO conditions).

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To: The permitted materials and utilization rates for the combined cycle gas turbine shall not exceed the values as follows:

- Maximum No. 2 fuel oil consumption shall not exceed 3,390 gals/hr.
- Maximum No. 2 fuel oil consumption shall not exceed 7,500,000 gals/yr.
- Maximum annual firing using No. 2 fuel oil shall not exceed 25% of the annual capacity factor.
- Maximum annual simple cycle operation shall not exceed 25% of the annual capacity factor.
- Maximum sulfur (S) content in the fuel oil shall not exceed 0.25 percent, by weight.
- Maximum heat input shall not exceed 414 MMBtu/hr (gas) or 438 MMBtu/hr (oil), based on 101.3 kilopascals pressure, 288° Kelvin and 60% relative humidity (ISO standard day conditions), and lower heating value of the fuel fired.

5. Specific Condition No. 10.: Request was to replace the operational parameter from "maximum heat input rate of operation" to "Base Load operation rate" and to add EPA Method 25A for testing VOCs.

R: As stated before, the Department will not revise the term "maximum heat input rate" because that was the rate at which the emissions unit was evaluated and permitted. In order to remove duplication of operational requirements when in the compliance testing mode, the second sentence will be deleted because the operating requirements during testing and subsequent operation modes are addressed in Specific Condition No. 14 and will be referenced. The Department finds EPA Method 25A acceptable for testing for VOCs and it will be added. In addition, the Department is adding the word "Note:" and the phrase "is received in writing" to the alternate test method approval statement.

From: Initial (I) compliance tests shall be performed on each CT using both fuels. The stack test for each turbine shall be performed within 10 percent of the maximum heat rate input for the tested operating temperature. Annual (A) compliance tests shall be performed on each CT with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using EPA referenced methods in accordance

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with the November 2, 1989, version of 40 CFR 60 Appendix A:

- a. 5 or 17 for PM (I, A, for oil only)
- b. 10 for CO (I)
- c. 9 for VE (I, A)
- d. 20 for NO_x (I, A)
- e. Trace elements of Beryllium (Be) shall be tested (I, for oil only) using EMTIC Interim Test Method. As an alternative, Method 104 may be used; or Be may be determined from fuel sample analysis using either Method 7090 or 7091, and sample extraction using Method 3040 as described in the EPA solid waste regulations SW 846.
- f. Mercury (Hg) shall be tested using EPA Method 101 (40 CFR 61, Appendix B) (I, for oil only) or fuel sampling analysis using methods acceptable to the Department.

Other DEP approved methods may be used for compliance testing after prior Departmental approval.

To: Initial (I) compliance tests shall be performed on each CT using both fuels. In accordance with **Specific Condition No. 14**, annual (A) compliance tests shall be performed on each CT with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using EPA referenced methods in accordance with the November 2, 1989 version of 40 CFR 60, Appendix A, and 40 CFR 61, Appendix B; and, the solid waste regulations SW 846:

- a. 5 or 17 for PM (I, A, for oil only)
- b. 10 for CO (I)
- c. 9 for VE (I, A)
- d. 20 for NO_x (I, A)
- e. Trace elements of Beryllium (Be) shall be tested (I, for oil only) using EMTIC Interim Test Method. As an alternative, Method 104 may be used; or Be may be determined from fuel sample analysis using either Method 7090 or 7091, and sample extraction using Method 3040 as described in the EPA solid waste regulations SW 846.

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- f. Mercury (Hg) shall be tested using EPA Method 101 (40 CFR 61, Appendix B) (I, for oil only) or fuel sampling analysis using methods acceptable to the Department.
- g. 25A for VOC (I; no VOC stack test is required provided that the CO stack test demonstrates compliance with the allowable CO limit)

Note: Other DEP approved methods may be used for compliance testing after prior Departmental approval is received in writing.

6. Specific Condition No. 13.: Request was to change the word "proposed" to "NSPS" regarding the standard.

R: The Department agrees with the request and will change the word "proposed" to "NSPS". Also, the equation and the definitions of the terms of the equation will be corrected pursuant to 40 CFR 60.335(c) (1).

From: During performance tests, to determine compliance with the proposed NO_x standard, measured NO_x emission at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following correction factor:

$$NO_x = (NO_x \text{ obs}) (P_{\text{ref}})^{0.5} e^{19} (H_{\text{obs}} - 0.00633) \frac{(288^\circ\text{K})}{T_{\text{AMB}}} 1.53$$

NO_x obs = Measured NO_x emission at 15 percent oxygen, ppmv.

P_{ref} = Reference combustor inlet absolute pressure at 101.3 kilopascals (1 atmosphere) ambient pressure.

P_{obs} = Measured combustor inlet absolute pressure at test ambient pressure.

H_{obs} = Specific humidity of ambient air at test.

e = Transcendental constant (2.718).

T_{AMB} = Temperature of ambient air at test.

To: During performance tests, to determine compliance with the NSPS NO_x standard, measured NO_x emission at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the

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following equation:

$$NO_x = (NO_{x0}) \times (P_r/P_o)^{0.5} \times e^{19(H_o - 0.00633)} \times (288^\circ K/T_a)^{1.53}$$

where:

NO_x = emission rate of NO_x at 15 percent O_2 and ISO standard ambient conditions, volume percent.

NO_{x0} = observed/measured NO_x concentration at 15 percent O_2 , ppmv.

P_r = reference combustor inlet absolute pressure at 101.3 kilopascals (1 atmosphere) ambient pressure, mm Hg.

P_o = observed/measured combustor inlet absolute pressure at test ambient pressure, mm Hg.

H_o = observed/specific humidity of ambient air, g H_2O /g air, at test.

e = transcendental constant, 2.718.

T_a = ambient temperature, °K, at test.

7. Specific Condition No. 14.: The request was to edit the testing requirements to conform to the way that other similar sources/emissions units have been required to operate during an initial and subsequent compliance tests and continue to operate after the compliance tests have been conducted. Since the initial compliance test has been conducted, notification of "any subsequent" compliance tests will be changed to "15 days in writing" in the text.

From: Test results will be the average of 3 valid runs. The Central District will be notified at least 30 days in advance of the compliance test. The source shall operate between 90% and 100% of permitted capacity during the compliance test. Compliance test results shall be submitted to the Central District office no later than 45 days after completion.

To: Test results will be the average of 3 valid runs. The Central District will be notified at least 15 days in writing in advance of any subsequent compliance test. Testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 95-100 percent of the maximum heat input rate

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allowed by permit, corrected for the average ambient air temperature during the test, with 100 percent capacity represented by a curve depicting heat input v. ambient temperature. If it is impracticable to test at permitted capacity, the source/emissions unit may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the heat input v. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 105 percent of the value reached during the last compliance test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of conducting an additional compliance test to regain the permitted capacity. Compliance test results shall be submitted to the Central District office no later than 45 days after completion.

8. Specific Condition No. 15.: Request was to delete the condition since the initial compliance test has been conducted.

R.: The request is denied because this is a construction permit issue, now and potentially in the future. The text specifies the test methods and operational parameters for demonstrating initial and subsequent compliance. In case SCR is imposed, the condition would be needed for demonstrating initial and subsequent compliance.

9. Specific Condition No. 16.: Request was to revise the condition to delete the requirement to continuously monitor the consumption of natural gas and fuel oil (when not at 100 percent); to include the reference to 40 CFR 75 regulations on CEMs installation, operation and maintenance; and, to revise the excess emission requirement.

R.: Since the standards for some pollutants are written as "lbs/MMBtu", then it is necessary to know the consumption of each type of fuel in order to establish compliance; therefore, the request is denied. Since 40 CFR 75 has not been adopted, reference to this regulation will be qualified appropriately. Excess emissions shall be as stated in Mr. Rhodes's letter dated October 6, 1993.

From: A continuous monitoring system shall be installed to monitor and record the fuel consumption. Continuous monitoring shall also be installed, operated, and maintained in accordance

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with 40 CFR 60, Appendix F, for the combined cycle unit to monitor nitrogen oxides emissions.

- a. Each continuous emission monitoring system (CEMS) shall meet performance specifications of 40 CFR 60, Appendix B.
- b. CEMS data shall be recorded and reported in accordance with Chapter 17-2, F.A.C., and 40 CFR 60. The record shall include periods of startup, shutdown and malfunction.
- c. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset conditions or preventable equipment breakdown shall not be considered malfunctions.
- d. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.
- e. For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration, as determined pursuant to Condition No. 22 herein, which exceeds the applicable emission limits in Condition No. 1.

To: A continuous monitoring system shall be installed to monitor and record the fuel consumption. Continuous monitoring shall also be installed, operated, and maintained in accordance with 40 CFR 60, Appendix F, **or 40 CFR 75, if adopted and applicable**, for the combined cycle unit to monitor nitrogen oxides emissions.

- a. Each continuous emission monitoring system (CEMS) shall meet performance specifications of 40 CFR 60, Appendix B, **or 40 CFR 75, if adopted and applicable**.
- b. CEMS data shall be recorded and reported in accordance with Chapter 17-2 (**now Chapter 62-297**), F.A.C., and 40 CFR 60. The record shall include periods of startup, shutdown and malfunction.
- c. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to

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operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset conditions or preventable equipment breakdown shall not be considered malfunctions.

- d. The procedures under 40 CFR 60.13 shall be followed for installation, evaluation and operation of all CEMS.
- e. For purposes of reports required under this permit, excess emissions are defined as any one (1) hour period during which the average emissions of all readings collected during a continuous 60-minute period exceed the applicable emission limits in **Table 5 referenced in Specific Condition No. 2**. Quarterly excess emissions reports, in accordance with the July 1, 1992 edition of 40 CFR 60.7 and 40 CFR 60.13, shall be submitted to the DEP's Central District office. The continuous emission monitor system (CEM) shall be in compliance with 40 CFR 60, Appendix F - Quality Assurance Procedure, and 40 CFR 60, Appendix B - Performance Specification 2 **or the applicable provisions of 40 CFR 75, if adopted**. EPA Method 7E or equivalent (requires Department approval in writing) shall be used for the Determination of Nitrogen Oxide Emissions.

10. Specific Condition No. 17.: Request was to qualify the parameters that are being tested for fuel oil only, i.e, sulfur, nitrogen and lower heating value, and to state that record keeping for fuel usage be for fuel oil only.

R.: The request is acceptable to qualify the parameters for the fuel oil firing. The retention time will be revised to 5-years due to Title V requirements.

From: Sulfur, nitrogen content and lower heating value of the fuel being fired in the gas turbine shall be recorded daily. The records of fuel oil usage will be kept by the company for a two-year period; available for regulatory agency's inspection.

To: Sulfur, nitrogen content and lower heating value of the fuel oil being fired in the gas turbine shall be recorded daily. The records of fuel oil usage will be kept by the company for a five-year period and available for any regulatory agency's inspection.

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11. Specific Condition No. 19.: Request was to revise the condition to add language to allow the use of CEMs data in lieu of monitoring the water/fuel ratio except when firing 100 percent fuel oil.

R.: The request is not acceptable. However, the CEMs can be used for excess emissions monitoring, which is consistent with Subpart GG.

From: This source shall comply with all requirements of 40 CFR 60, Subpart GG and F.A.C. Rule 17-2.660(2)(a), Standards of Performance for Stationary Gas Turbines.

To: This source/emissions unit shall comply with all requirements of 40 CFR 60, Subpart GG and F.A.C. Rule 62-296.800, standards of performance for Stationary Gas Turbines. Excess emissions shall be reported as measured by the continuous emission monitoring system pursuant to 40 CFR 60.334(c).

12. Specific Condition No. 22.: Request was to revise the condition to reflect that the fuel parameters being analyzed are consistent with Specific Condition No. 17.

R.: The request is acceptable and the condition will be revised. However, the requirements of reporting natural gas usage is not being deleted and will be further clarified. Other edits were made to clarify the report parameters and to correct the rule citing and reference.

From: Pursuant to F.A.C. Rule 17-2.210(2), Air Operating Permits, the permittee is required to submit annual reports on the actual operating rate and emissions from the facility. These reports shall include, but are not limited to the following: sulfur, nitrogen content and lower heating value of the fuel being fired, fuel usage, hours of operation, air emissions limits, etc. Annual reports shall be sent to the Department's Central District office.

To: Pursuant to Rule 62-210.370(3), F.A.C., Air Operating Report (AOR), the permittee is required to submit an AOR on the actual operating rate and emissions from the facility for the previous year's operation. The AOR shall include, but is not limited to, the following: sulfur and nitrogen contents, by weight, and lower heating value of the fuel oil being fired, annual fuel consumption (fuel oil and natural gas), hours of

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operation per fuel usage (singly fired and co-fired), actual air pollutant emissions, etc. The AOR shall be sent to the Department's Central District office by March 1 of each year and represents the previous calendar year's operation.

13. Attachments to be Incorporated:

- o Mr. Howard L. Rhodes's letter dated October 6, 1993.
- o Mr. Peter C. Cunningham's letter with Enclosures dated June 30, 1994.
- o Mr. John C. Brown, Jr.'s letter dated July 27, 1994.
- o Mr. Gary V. Perko's letter with Attachments received September 20, 1994.
- o Mr. Howard L. Rhodes's letter dated October 4, 1994.
- o Mr. John C. Brown, Jr.'s letter dated October 20, 1994.
- o Mr. Gary v. Perko's letter with Attachments received on December 7, 1994.
- o Mr. Howard L. Rhodes's letter dated January 31, 1995.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information:

- (a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

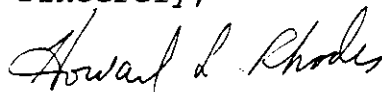
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- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the amendment request/application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this amendment in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

This letter amendment must be attached to Construction Permit, No. AC 31-184928A/PSD-FL-152A, and shall become part of the permit.

Sincerely,



Howard L. Rhodes
Director
Division of Air Resources
Management

HLR/CL/bjb

Enclosure

cc: C. Collins, CD
J. Harper, EPA
J. Bunyak, NPS

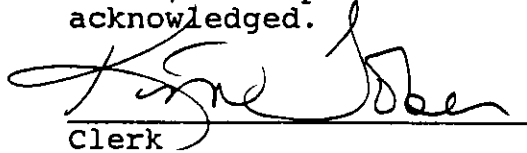
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CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this AMENDMENT and all copies were mailed by certified mail before the close of business on 3-30-95 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to
120.52(11), Florida Statutes,
with the designated Department
Clerk, receipt of which is hereby
acknowledged.


Clerk

3/30/95
Date

CITY OF VERO BEACH MUNICIPAL POWER PLANT UNIT 5 (AC31-184928A/PSD-FL-152A)

Table 5 (New: replaces Tables 1 thru 4)
ALLOWABLE EMISSION LIMITS

Pollutant	Standards		Gas Turbine and HRSG Tons Per Year (a)(b)	Basis
	Gas Firing	No. 2 Fuel Oil Firing		
NOx(c)	25 ppmvd at 15% oxygen on a dry basis	42 ppmvd at 15% oxygen on a dry basis	243.7	BACT
SO2	Natural gas as fuel	0.25% S by weight	130.0	BACT
PM	0.006 lbs/MMBtu	0.025 lbs/MMBtu	20.1	BACT
VOC	0.0112 lbs/MMBtu	0.0113 lbs/MMBtu	20.7	BACT
CO	0.0224 lbs/MMBtu	0.0226 lbs/MMBtu	41.3	BACT
Mercury (Hg)		3.0×10^{-6} lbs/MMBtu	0.0015	Est. by Appl.
Lead (Pb)		2.8×10^{-5} lbs/MMBtu	0.014	Est. by Appl.
Beryllium (be)		2.5×10^{-6} lbs/MMBtu	0.0012	BACT
Sulfuric Acid Mist	Natural gas as fuel	8.1×10^{-3} lbs/MMBtu	3.9	BACT

(a) Tons per year figures based on 75 percent capacity factor for natural gas firing; 25 percent capacity factor for No. 2 fuel oil firing. Maximum sulfur content of the No. 2 fuel oil shall not exceed 0.025%, by weight.

(b) Based on following heat input rates while firing: Natural Gas - 414 MMBtu/hr; and, No. 2 Fuel Oil - 438 MMBtu/hr.

(c) The following equation shall be used to determine the emission standard applicable during co-firing of natural gas and No. 2 fuel oil:

$$\text{Emission standard} = \frac{(A1 \times A2) + (B1 \times B2)}{A2 + B2}$$

Where:

A1 = Emission Standard for Natural Gas Firing

A2 = Heat Input of Natural Gas

B1 = Emission Standard for No. 2 Fuel Oil Firing

B2 = Heat Input of No. 2 Fuel Oil

Memorandum

Florida Department of
Environmental Protection

TO : Howard L. Rhodes
FROM : Clair Fancy *CHF*
DATE : March 27, 1995
SUBJECT: Approval of Construction Permit Amendment
AC 31-184928A/PSD-FL-152A
City of Vero Beach Municipal Power Plant Unit 5

Attached for your approval and signature is an amendment to the City of Vero Beach Municipal Power Plant Unit 5's construction permit prepared by the Bureau of Air Regulation. The objectives of this amendment are: 1) to update permit conditions to reflect the installation of dry low-NO_x combustors; 2) to replace the Allowable Emission Limits Tables 1 through 4 with a new Table 5; and, 3) to clarify specific permit requirements and to correct rule citations and references. This amendment will not cause an increase in annual allowable emission limits or allowable emission standards.

This amendment is recommended for your approval and signature.

CHF/cl/l

Attachment

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. Addressee's Address
- 2. Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
 Mike Siefert
 Vero Beach Municipal P. Plant
 P O BOX 1389
 Vero Beach, FL 32961

4a. Article Number
 2311 902 944

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

7. Date of Delivery
 4-3-95

5. Signature (Addressee)
 George Young

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

6. Signature (Agent)

Thank you for using Return Receipt Service.

RETURN RECEIPT

Z 311 902 944



Receipt for Certified Mail

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

PS Form 3800, March 1993

Section 1	
Name <i>Mike Siefert</i>	
Street and No. <i>Vero Beach MPP</i>	
P.O. State and ZIP Code <i>Vero Beach, FL</i>	
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	<i>3-30-95</i>
<i>AC 31-18492BA</i> <i>P5D-F1-152A</i> <i>Unit 5</i>	