Florida Department of
Environmental Protection

Memorandum

BAR

TO: Howard L. Rhodes

THRU: Clair H. Fancy
Scott Sheplak

FROM: Edward Svec

DATE: March 27, 2001

SUBJECT: Vero Beach Municipal Power Plant
DEP File No: 0610029-004-AC (PSD-FL-152C)

Attached is the final PSD permit modification package for the compressor inlet evaporative cooler project at the Vero Beach Municipal Power Plant. The application is for the installation of an inlet evaporative cooler ahead of the compressor inlet of the combined cycle combustion turbine-electrical generator (Unit 005). The evaporative cooler will operate on hot days and days of relatively low humidity. The evaporative cooling effect will allow the unit to operate closer to the rated capacity.

Both short-term and annual emissions will increase because the heat rate through the unit will increase when the evaporative cooler is operated. Maximum short-term emissions will still occur during cold days when use of the evaporative cooler is not feasible. The unit already complies with 40 CFR 60, Subpart GG, so NSPS applicability is not an issue. PSD is not triggered by their use.

I recommend your signature and approval of the cover letter and the final permit modification letter.

SMS/es

Attachments

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

1. Applicant

City of Vero Beach
100 17th Street
Vero Beach, Florida 32960

Authorized Representative: Rex Taylor, City Manager, Utilities Director

2. Source Name and Location

City of Vero Beach Municipal Utilities
100 17th Street
Vero Beach, Florida 32960

UTM Coordinates: Zone 17, 561.4 km East and 3056.5 km North

3. Source Description

The City of Vero Beach Municipal Utilities Plant holds a Title V operating permit for four fossil fuel fired steam generators (Units 1-4), and one combined cycle gas turbine (Unit 5). Also included in this permit are two unregulated emissions units identified as fuel oil, gasoline and lube oil storage tanks and a wastewater treatment plant. Based on the Title V application, this facility is a major source of hazardous air pollutants (HAPs).

Fossil Fuel Steam Generator, Unit 1, rated at 13 MW, 202 mmBtu/hr for natural gas and 140 mmBtu/hr for fuel oil, capable of burning any combination of natural gas and numbers 2, 4 and 6 fuel oil, with emissions exhausted through a 200 ft. stack shared with Emissions Unit 002. The emissions unit is regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with Less than 250 million Btu per Hour Heat Input. Fossil fuel fired steam generator Unit 1 began commercial operation in 1961.

Fossil Fuel Steam Generator, Unit 2, rated at 17 MW, 248 mmBtu/hr for natural gas and 243 mmBtu/hr for fuel oil, capable of burning any combination of natural gas, numbers 2, 4 and 6 fuel oil, and propane as an ignitor fuel, with emissions exhausted through a 200 ft. stack shared with Emissions Unit 001. The emissions unit is regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with Less than 250 million Btu per Hour Heat Input. Fossil fuel fired steam generator Unit 2 began commercial operation in 1964.

Fossil Fuel Steam Generator, Unit 3, rated at 34 MW, 417 mmBtu/hr for natural gas and 410 mmBtu/hr for fuel oil, capable of burning any combination of natural gas, numbers 2, 4 and 6 fuel oil, and propane as an ignitor fuel, with emissions exhausted through a 200 ft. stack. The emissions unit is regulated under Acid Rain, Phase II and Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input. Fossil fuel fired steam generator Unit 3 began commercial operation in 1971.

Fossil Fuel Steam Generator, Unit 4, rated at 56 MW, 685 mmBtu/hr, capable of burning any combination of natural gas, numbers 2, 4 and 6 fuel oil, and propane as an ignitor fuel, with emissions exhausted through a 200 ft. stack. The emissions unit is regulated under Acid Rain, Phase II, and is subject to 40 CFR 60 Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971. Fossil fuel fired steam generator Unit 4 began commercial operation in 1976.

Combined Cycle Gas Turbine, Unit 5, a General Electric Model PG6541B, is rated at 38 MW, 455 mmBtu/hr for number 2 fuel oil and 414 mmBtu/hr for natural gas, capable of burning any combination of, number 2 fuel oil, and natural gas, with emissions exhausted through a 125 ft. stack. This emissions unit is regulated under Acid Rain, Phase II and is subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines. This unit underwent a BACT Determination dated June 28, 1991. BACT Limits were incorporated into the subsequent PSD permits including AC 31-253502 (PSD-FL-152B). Exhaust is vented through the heat recovery steam generator that is not equipped with duct burners and then through a 125 ft. stack. Emissions are controlled by dry low-NOx burners when firing natural gas, and by water injection when firing fuel oil. The turbine exhaust may also be vented through a bypass stack for simple cycle operation. The turbine began commercial operation in 1992.

4. Current Permit and Major Regulatory Program Status

City of Vero Beach Municipal Utilities Units 1,2, and 3 were granted operating permits as existing units by the Department. Construction of Unit 4 was authorized by the Department under permit AC31-2182. Unit 5 was authorized construction under AC31-184928 and Permit.PSD-FL-152. Unit 5 was modified by permits AC31-184928A and PSD-FL-152A on March 27, 1995 and again by permits AC31-253502 and PSD-FL-152B on September 21, 1995. AC31-253502/ PSD-FL-152B effectively superseded the previous construction permits.

The facility operates under Title V Air Operation Permit No. 0610029-002-AV effective January 1, 1998. This facility is a major source of hazardous air pollutants (HAPs) based on information submitted in the Title V application.

The combustion turbine is subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines. The combined cycle unit and the fossil fuel steam generators are regulated under the Title IV of the Clean Air Act, Acid Rain, Phase II.

5. Permit Modification Request

On November 1, 2000 the Department received a request from the City of Vero Beach for modification of its permits to install direct water spray fogging systems in the inlet duct of Combustion Turbine (CT) Unit 5 (ARMS Emissions Unit 005). The project is a performance enhancement that can improve both the turbine power output and the heat rate of the unit. The principle is based on evaporative cooling of the incoming, filtered, ambient air to lower its temperature and increase its density.

The combustion turbine is typically rated by General Electric at approximately 38 MW at 59 degrees when firing gas. The combustion turbines (exclusive of the steam cycle) normally achieve their maximum rated output on cold (32 degrees) days because the greater compressor inlet air density allows greater throughput in the rotor or expansion section of the combustion turbine. The maximum power output is only about 32 MW on hot (100 degrees) days because of the lower compressor inlet air density. The evaporative coolers can increase hot-day power output (under dry conditions) by around 6 MW, thus almost restoring the units to their nominal rating. The evaporative coolers provide no benefit under humid or cold (less than approximately 50 degrees) conditions and will not be used when they occur. The maximum output of approximately 38 MW will continue to occur at low ambient temperature.

Inlet evaporative coolers are routinely included in new combustion turbine projects and have not affected the Department's decisions regarding Best Available Control Technology.

6. **Emissions Increases Due to Modification/Method of Operation**

The evaporative coolers are physical pieces of equipment whose addition and use can increase emissions on hot or dry days. The use of the evaporative coolers can also be considered a change in method of operation of the inlet "air conditioning system" that is already used to filter incoming air.

Assuming a design condition for Florida of 95 degrees (°F) and 50 percent (%) relative humidity, evaporative cooling to the point of saturation of the incoming gas stream results in a temperature decrease of approximately 16 °F to 79 °F. This represents an increase of roughly 5% in power output or on the order of 2 MW. Under average annually averaged conditions, the reduction typically possible is on the order of 5.5 °F, with an associated power increase of about 1 MW.

Refer to attached Heat Input versus Ambient Temperature Curve. The City of Vero Beach estimated that that heat input to the combustion turbine will increase by approximately 1.2 mmBtu per hour per degree of temperature reduction (mmBtu/hr/°F) by evaporative cooling, when firing natural gas. If emissions rates are known in terms of pounds per mmBtu (lb/mmBtu), the increase on hourly emissions can be estimated.

The City of Vero Beach assumed that the unit will be operated 8,760 hours per year gas and 2,871 hours on oil. The annual emissions were determined by multiplying the heat input increase per degree Fahrenheit (°F) times the emissions rate in lb/mmBtu for the number of °F –hours proposed for the turbine. The °F –hours/year represents the maximum potential amount of annual temperature reduction of evaporative cooling and was calculated by using the average temperature reduction multiplied by the hours of year assumed. For example, the °F –hours for gas firing are calculated by multiplying 8,760 hours by 10 °F, or 87,600 °F –hours. For Unit 5, a maximum of 58,890 °F-hours of operation on natural gas and 28,710 °F-hours of operation firing distillate fuel oil was used as the basis for the annual emissions estimate. Annual emissions are estimated as detailed in the following table.

TOTAL EMISSIONS INCREASES DUE TO USE OF INLET EVAPORATIVE COOLER

Pollutant	Emission Rate lb/mmBtu (gas)	Emission Rate lb/mmBtu (oil)	Emission Increase ton/yr (gas)	Emission Increase ton/yr (oil)	Annual Increase tons/yr (Oil & Gas)	PSD Threshold tons/yr
NO_x	0.1070	0.1736	5.56	3.25	6.98	40
PM/PM_{10}	0.0060	0.0250	0.31	0.47	0.68	25/15
CO	0.0224	0.0226	1.16	0.42	1.20	100
VOC	0.0112	0.0113	0.58	0.21	0.60	40
SO_2	0.0030	0.2700	0.16	5.05	5.16	40

Source: Application submitted on November 1, 2000.

Limiting the unit to 5,889 hours of operation on gas and 2,871 hours of operation on oil will not effectively insure that annual emissions increases will not exceed the values given above. This is because the hours of operation will be chosen with a bias toward the days when the possible temperature decrease is greater than that assumed in the calculation. However, because the annual increases are so far below PSD thresholds, restriction to the current fuel use restrictions contained in the current Title V permit will ensure the thresholds will not be exceeded.

The emissions increases calculated are the direct result from the physical change in or change in method of operation such as is the installation of the inlet evaporative coolers. These assume that the ability to achieve greater power output when the evaporative coolers are used does not result in emissions increases outside the turbines original power curve. The rationale is discussed below.

The emissions characteristics (GE performance curves) do not change as a result of the use of the evaporative coolers from what would normally occur throughout the entire range of temperatures and relative humidity. Rather, the evaporative coolers move the operating points along the same curve toward the power and emissions that normally occur at lower temperatures. The worst case emissions scenario will still occur during the winter months and will occur with the evaporative coolers off. According to GE (reference: Brooks, 1996), evaporative cooling is limited to ambient temperatures of 59 °F and above because of the potential for icing the compressor.

7. **Evaluation of PSD Applicability**

As a major source, a modification or change in method of operation of Unit 5 resulting in **significant net emissions increases** is subject to PSD review. Significant net emissions increase is defined in Rule 62-212.400, F.A.C as follows:

> *Significant Net Emissions Increase – A significant net emissions increase of a pollutant regulated under the Act is a **net emissions increase** equal to or greater than the applicable significant emission rate listed in Table 212.400-2, Regulated Air Pollutants – Significant Emission Rates.*

The significant emission rates are included (see PSD Threshold) in the Table above. The meaning of a net emissions increase is given in Rule 62-212.400, F.A.C. as:

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

The definition of actual emissions is given in Rule 62-210.200, F.A.C. (definitions) as follows:

> *Actual Emissions - The actual rate of emission of a pollutant from an emissions unit as determined in accordance with the following provisions:*
>
> *(a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during a two year period which precedes the particular date and which is representative of the normal operation of the emissions unit. The Department may allow the use of a different time period upon a determination that it is more representative of the normal operation of the emissions unit. Actual emissions shall be calculated using the emissions unit's actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.*
>
> *(b) The Department may presume that unit-specific allowable emissions for an emissions unit are equivalent to the actual emissions of the emissions unit provided that, for any regulated air pollutant, such unit-specific allowable emissions limits are federally enforceable.*

(c) For any emissions unit (other than an electric utility steam-generating unit specified in subparagraph (d) of this definition) which has not begun ***normal operations*** *on a particular date, actual emissions shall equal the* ***potential*** *emissions of the emissions unit on that date.*

(d) ***For an electric utility steam generating unit*** *(other than a new unit or the replacement of an existing unit) actual emissions of the unit following a physical or operational change shall equal the representative actual annual emissions of the unit following the physical or operational change, provided the owner or operator submits to the Department on an annual basis, for a period of 5 years representative of normal post-change operations of the unit, within the period not longer than 10 years following the change, information demonstrating that the physical or operational change did not result in an emissions increase. The definition of "representative actual annual emissions" found in 40 CFR 52.21(b)(33) is adopted and incorporated by reference in Rule 62-204.800, F.A.C.*

The term electric utility steam-generating unit is defined as:

Electric Utility Steam Generating Unit – Any steam electric generating unit that is constructed for the purpose of supplying more than one-third of its potential electric output capacity and more than 25 MW electrical output to any utility power distribution system for sale. Any steam supplied to a steam-electric generator that would produce electrical energy for sale is also considered in determining the electrical energy output capacity of the unit.

Based on Department records, actual hours of operation since 1994 are as follows:

Annual Operating Hours 1994 - 1999

1994	1995	1996	1997	1998	1999
7,212	7,302	7,794	4,073	2,540	3,324

The operation can be characterized as "baseload." The evaporative coolers will be allowed to operate continuously but will be limited in terms of "degree-hours." As previously mentioned, if the average temperature drop is in fact 10 °F, they can operate 5,889 hours on gas and 2,871 hours on oil for a total of 8,760 hours per year.

The combustion turbines have clearly begun *normal operation.* As modern combined cycle units, they are very efficient in comparison with conventional boiler-based steam-electrical units. The combustion turbine-electrical generator produces 38 MW (nominal) of electrical power. Therefore, the correct approach to determine the magnitude of a net emissions increase is to compare actual emissions from preceding years with representative actual annual emissions as described for steam electrical units.

The City of Vero Beach asserts and the Department accepts that use of the inlet evaporative coolers will not affect the hours of operation of the unit. As mentioned previously, they are already baseload units and any downtime is more likely due to maintenance than to demand. Most likely the combined cycle unit will continue their normal baseload operation within the recent historical hours per year per unit. The emissions are directly related to the hours of operation.

The modification project can be isolated from the normal operation of the units and its effects can be directly predicted and measured without having to make annual comparisons of actual emissions

from the combined cycle units before and after the change. The modification itself (i.e. installation and operation of the evaporative coolers), however, has not yet begun normal operation. The future actual emissions caused by the modification are equal to the potential-to-emit, which is based on the increases in heat input associated with the use of the fogging system.

The number of days during which the evaporative coolers can economically operate probably limits actual emissions increases to levels below significance for the purposes of PSD applicability. However, the City of Vero Beach sample calculations proposes to limit operation of the evaporative coolers to the equivalent of 5,889 (gas) when 2,871 (oil) hours per year on the basis of a 10 °F average compressor are used. This equates to 58,890 °F-hr on gas and 28,710 °F-hr on oil. If, for example, the average temperature drop is actually 20 °F, the evaporative coolers will only be allowed to operate half as many hours as the base case. Emissions will increase under these limitations (as previously tabulated) by levels less than the significant emissions rates. The Department concludes, therefore, that PSD does not apply to this project.

8. **Proposed Addition of New Conditions to PSD-FL-152**

The combustion turbine was constructed under the authority of PSD permit No. PSD-FL-152 issued on July 1,1991. This permit was modified on March 27, 1995 and September 21, 1995. The Department will amend PSD-FL-152 adding a new condition authorizing installation and operation of the inlet evaporative cooler.

The new condition applicable to the inlet evaporative cooler proposed for Unit 5 (ARMS Emissions Unit 005) is shown in the draft PSD permit modifications. It does not limit operation of the inlet evaporative cooler..

9. **Conclusions**

The project will not increase the maximum short-term emission rates as these are already achieved under natural conditions of low ambient temperatures without the use of the evaporative coolers.

The Department concludes that PSD is not applicable to this project since this project as presented will not result in significant net emissions increase to major facility. The changes will not cause a significant impact or cause or contribute to a violation of any ambient air quality standard or PSD increment.

The Department's conclusion does not set a precedent for projects implemented at any facilities other than combined cycle unit inlet evaporative cooler installations. It does not set precedents related to any physical changes within the compressors, combustors, rotors, or other key components at such units. The application and determination of the Department's rules does not constitute an interpretation of the EPA rules under 40CFR52.21, Prevention of Significant Deterioration or 40CFR60, New Source Performance Standards.

For further details regarding this review, contact:

Scott Sheplak, P.E. Administrator
Edward Svec, Review Engineer
Title V Section
Bureau of Air Regulation
850/488-1344

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF PSD PERMIT MODIFICATION

In the Matter of an
Application for Permit Modification by:

City of Vero Beach
100 17th Street
Vero Beach, Florida 32960

Authorized Representative:
Rex Taylor, City Manager, Utilities Director

DEP File No.	PSD-FL-152 C
Permit No.	0610029-004-AC
Project	Evaporative Cooling System
SIC No.	4911
Expires:	December 31, 2001

Enclosed is the Final Permit Number 0610029-004 AC (PSD-FL-152C) for a PSD permit modification to an evaporative cooling system on the existing 38 MW combined cycle General Electric PG6541B combustion turbine-electrical generator designated as City of Vero Beach Municipal Utilities Unit 5. This permit is a re-issuance of the original air construction permit authorizing the construction of Unit 5 and incorporating subsequent modifications including the present project. The unit is located at the as City of Vero Beach Municipal Utilities Plant, 100 17th Street, Vero Beach, Indian River County. The UTM coordinates are: Zone 17; 561.4 km E and 3056.5 km N.

This permit modification is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PSD PERMIT MODIFICATION (including the FINAL permit modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 4/4/01 to the person(s) listed:

Rex Taylor, City of Vero Beach*
Richard Siefert, City of Vero Beach
Ken Kosky P.E., Golder Associates
Len Kozlov, CD
Gregg Worley, EPA

Clerk Stamp

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

Barbara K. Friday 4/4/01
(Clerk) (Date)

FINAL DETERMINATION

City of Vero Beach
Vero Beach Municipal Power Plant, Indian River County
Evaporative Cooling System Installation
DEP File No: 0610029-004-AC (PSD-FL-152C)

An Intent to Issue an air construction permit modification, authorizing the addition of an inlet Evaporative Cooler to the combined cycle combustion turbine-electrical generator (Unit 005) at the City of Vero Beach Municipal Utilities plant in Indian River County was distributed on January 18, 2001. The unit is located at the as City of Vero Beach Municipal Utilities Plant, 100 17th Street, Vero Beach, Indian River County, Florida.

The Public Notice of Intent to Issue Air Construction Permit was published in The Press Journal, Indian River County on February 7, 2001. Comments were received from the City of Vero Beach.

The comments solely concerned the substitution of the term "evaporative cooling" for the term "fogger", which was used to describe the project throughout the Technical Evaluation and Preliminary Determination and the Draft of the Permit. Since this terminology change does not constitute a significant change, the substitution of terms was made throughout the affected documents.

The final action of the Department will be to issue the permit modification as noted above.

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

PERMITTEE:

City of Vero Beach
100 17th Street
Vero Beach, Florida 32960

Authorized Representative:

Rex Taylor
City Manager, Utilities Director

DEP File No.	PSD-FL-152 C
Permit No.	0610029-004-AC
Project	Evaporative Cooling System
SIC No.	4911
Expires:	December 31, 2001

PROJECT AND LOCATION:

Installation of an evaporative cooling system on the existing 38 MW combined cycle General Electric PG6541B combustion turbine-electrical generator designated as City of Vero Beach Municipal Utilities Unit 5. This permit is a re-issuance of the original air construction permit authorizing the construction of Unit 5 and incorporating subsequent modifications including the present project.

The unit is located at the as City of Vero Beach Municipal Utilities Plant, 100 17th Street, Vero Beach, Indian River County.

The UTM coordinates are: Zone 17; 561.4 km E and 3056.5 km N.

STATEMENT OF BASIS:

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

ATTACHED APPENDICES MADE A PART OF THIS PERMIT:

Appendix GC	Construction Permit General Conditions
Appendix SC	Specific Conditions including Permits PSD-FL-152 (AC31-184928), PSD-FL-152A (AC31-184928A) and PSD-FL-152B (AC31-253502)

Howard L. Rhodes, Director
Division of Air Resources
Management

G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

a) Have access to and copy and records that must be kept under the conditions of the permit;
b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

a) A description of and cause of non-compliance; and
b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

G.9 In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extend it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

G.10 The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

G.11 This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

G.12 This permit or a copy thereof shall be kept at the work site of the permitted activity.

G.13 This re-issued permit incorporates previous determinations for:

a) Best Available Control Technology (X)
b) Prevention of Significant Deterioration (X); and
c) New Source Performance Standards (X).

G.14 The permittee shall comply with the following:

a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c) Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements;
2. The person responsible for performing the sampling or measurements;
3. The dates analyses were performed;
4. The person responsible for performing the analyses;
5. The analytical techniques or methods used; and
6. The results of such analyses.

G.15 When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

1. This permit, PSD-FL-152C (DEP File 0610029-004-AC), supersedes PSD permit PSD-FL-152B (DEP File AC31-253502) issued on September 21, 1995.
2. The provisions of air construction permit PSD-FL-152 (AC31-184928) issued on July 1, 1991 to construct Unit 5 and subsequent revisions PSD-FL-152A (AC31-184928A) issued on March 27, 1995 and PSD-FL-152B (AC31-253502) issued on September 21, 1995 are attached and incorporated into this air construction permit in addition to the change that follows in Specific Condition 3 below.
3. An evaporative cooling system may be installed at the compressor inlet of the City of Vero Beach Municipal Utilities Unit 5. The system may be operated at any time that Unit 5 is in operation.

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF PERMIT AMENDMENT

In the matter of an
Application for Permit Amendment by:

DEP File No. AC 31-253502
PSD-FL-152B
Indian River County

Mr. Mike Siefert
City of Vero Beach
100 - 17th Street
Post Office Box 1389
Vero Beach, Florida 32961-1389

Enclosed is amended permit No. AC 31-253502, PSD-FL-152B, to incorporate permit changes to reflect the installation of new dry low-NOx combustors. This permit amendment is issued pursuant to Section 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 14 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this **NOTICE OF PERMIT AMENDMENT** and all copies were mailed by certified mail before the close of business on 9-27-95 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.

Lynn Jobes
Clerk

9-27-95
Date

Copies furnished to:
T. R. Nason, CVB
Gary Perko, HGSS
Charles Collins, CD
Jewell Harper, EPA
John Bunyak, NPS

Final Determination

Vero Beach Municipal Power Plant
Power Plant Unit 5
Indian River County, Florida

Construction Permit No.
AC 31-253502
PSD-FL-152B

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

September 21, 1995

Final Determination

Vero Beach Municipal Power Plant
Power Plant Unit 5

AC 31-253502
PSD-FL-152B

The City of Vero Beach's request for permit modifications at its facility in Vero Beach, Indian River County, Florida, has been reviewed by the Bureau of Air Regulation in Tallahassee. The Notice of Intent to Issue was distributed on August 4, 1995. Copies of the evaluation were available for inspection at the Department's offices in Orlando and Tallahassee.

Comments were submitted Mr. Gary V. Perko, Esq., on behalf of the City of Vero Beach. The Bureau has considered Mr. Perko's comments and has agreed on the changes he requested. In addition, the changes that were pointed out were the changes that were being made in this permitting action; however, the transposition of some of the changes did not happen in the proposed permit for some reason. Specific Condition No. 7 will be changed as follows:

A. Specific Condition No. 7.:

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.
- 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.

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 3,482 gals/hr.

- Maximum **annual** No. 2 fuel oil consumption shall not exceed **10,000,000** gals/yr.
- Maximum annual firing using No. 2 fuel oil shall not exceed **33%** 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 455 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.

B. Attachments to be incorporated:

o Mr. Gary V. Perko's letter with attachment received August 18, 1995.
o Mr. Shuler W. Massey's letter with enclosure dated August 28, 1995.

It is recommended that the proposed construction permit/amended federal construction permit, No. AC 31-253502/PSD-FL-152B, be issued with the above changes made.

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

PERMITTEE:
Vero Beach Municipal Power Plant
Post Office Box 1389
Vero Beach, Florida 32961

APIS No: 30ORL310005
Permit Number: AC31-253502/PSD-FL-152B
Expiration Date: August 15, 1996
County: Indian River
Latitude/Longitude: 27°37'59"N
80°22'41"W
Project: Modification of Power Plant Unit 5: 60 MW Combined Cycle Gas Turbine

This permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210, 62-212, 62-275, 62-296, and 62-297, Florida Administrative Code (F.A.C.). The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department of Environmental Protection (Department) and specifically described as follows:

For authorization to increase the allowable sulfur dioxide (SO_2) emissions from the existing 60 MW combined cycle gas turbine located at the Vero Beach Municipal Power Plant in Vero Beach, Indian River County, Florida. The increase is due to the installation of dry low-NO_X burners and an increase in the potential fuel oil consumption rate. The UTM coordinates are 561.385 km East and 3056.538 km North.

The Specific Conditions contained in air construction permits, Nos. AC 31-184928/PSD-FL-152, and an associated letter amendment to construction permits, Nos. AC 31-184928A/PSD-FL-152A, are superceded by this permit's Specific Conditions for only the changes that are bolded. The original BACT determination does not require revision.

Attachments are listed below:

1. Construction permits, Nos. AC 31-184928/PSD-FL-152, and revised BACT issued June 28, 1991.
2. Mr. Howard L. Rhodes's letter amendment dated March 27, 1995.
3. Mr. Peter C. Cunningham's letter with Attachments dated and received May 16, 1995.
4. **Mr. C. H. Fancy's letter with attachments dated August 4, 1995.**
5. **Mr. Gary V. Perko's letter with attachment received August 18, 1995.**
6. **Mr. Shuler W. Massey's letter with enclosure dated August 28, 1995.**

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.

2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.

4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of

GENERAL CONDITIONS:

credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

a. Have access to and copy any records that must be kept under the conditions of the permit;

b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,

c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

a. a description of and cause of non-compliance; and,

b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.

GENERAL CONDITIONS:

11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

(X) Determination of Best Available Control Technology (BACT): AC 31-184928
(X) Determination of Prevention of Significant Deterioration (PSD): PSD-FL-152
(X) Compliance with New Source Performance Standards (NSPS): 40 CFR 60, Subpart GG

14. The permittee shall comply with the following:

a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and,
- the results of such analyses.

SPECIFIC CONDITIONS:

1. **The permittee shall maintain the construction required duct modules for the potential installation of a selective catalytic reduction (SCR) system.**

2. 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. Unless the Department has determined other concentrations are required to protect public health and safety, predicted ambient **reference** concentrations (ARC) of the following pollutants shall not be exceeded:

Pollutant	Ambient Reference Concentrations ug/m^3 8 hrs.	24 hrs	Annual
Beryllium	0.02	0.005	0.0004
Lead	1.5	0.36	0.09
Inorganic mercury compounds, all forms of vapor, as Hg	--	--	0.3

4. Visible emissions shall not exceed 10% opacity.

5. This source/**emissions** unit is allowed to operate continuously (8760 hours per year).

6. This source/**emissions** unit is allowed to use either natural gas or No. 2 fuel oil.

7. 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 3,482 gals/hr.
- Maximum **annual** No. 2 fuel oil consumption shall not exceed 10,000,000 gals/yr.
- Maximum annual firing using No. 2 fuel oil shall not exceed 33% of the annual capacity factor.
- Maximum sulfur (S) content in the fuel oil shall not exceed 0.25 percent, by weight.

SPECIFIC CONDITIONS:

- Maximum heat input shall not exceed 414 MMBtu/hr (gas) or 455 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.

8. Any change in the method of operation, equipment or operating hours shall be submitted to the Department's Bureau of Air Regulation office and Central District office.

9. Any other operating parameters established during compliance testing and/or inspection that will ensure the proper operation of this facility shall be included in the operating permit.

10. 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.

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.

SPECIFIC CONDITIONS:

11. Method 5 must be used to determine the initial compliance status of this unit. Thereafter, the opacity emissions test may be used unless 10% opacity is exceeded.

12. Compliance with the SO_2 emission limit can also be determined by calculations based on fuel analysis using ASTM D2880-71 for the sulfur content of liquid fuels and ASTM D1072-80, D3031-81, D4084-82 or D3246-81 for sulfur content of gaseous fuels.

13. During performance tests, to determine compliance with the NSPS NO_X standard, measured NO_X emissions at 15 percent oxygen will be adjusted to ISO ambient atmospheric conditions by the following equation:

$$NO_X = (NO_{XO}) \times (P_r/P_o)^{0.5} \times e^{19(Ho - 0.00633)} \times (288°K/T_a)^{1.53}$$

where:

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

NO_{XO} = 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.

14. 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 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

SPECIFIC CONDITIONS:

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 Department's Central District office no later than 45 days after completion.

15. After the installation of low NO_X combustors or SCR, the permittee shall determine compliance with the NO_X standards in accordance with Specific Conditions Nos. 10 and 13.

16. 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 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 Department's Central District office. The continuous

SPECIFIC CONDITIONS:

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.

17. 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.

18. This source/**emissions unit** shall comply with all applicable provisions of Chapter 403, F.S., and Chapters 17-2 and 17-4 **(now Chapters 62-210 thru 62-297 and 62-4, respectively)**, F.A.C.

19. 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).

20. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements and regulations (F.A.C. Rule 62-2.210(1)).

21. This source/**emissions unit** shall comply with F.A.C. Rule 62-2.700 **(now Chapters 62-296 and 62-297)**, Stationary Point Source Emission Test Procedure.

22. 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 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.

23. The Specific Conditions contained in air construction permits, Nos. AC 31-184928/PSD-FL-152, and associated letter amendment to construction permits, Nos. AC 31-184928A/PSD-FL-152A, are superceded by this permit's Specific Conditions for only the changes that are printed in bold type.

SPECIFIC CONDITIONS:

24. The permittee, for good cause, may request that this construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation prior to 60 days before the expiration of the permit. (Rule 62-4.090, F.A.C.)

25. If Florida is granted interim or full approval for the Title V operation permit program prior to December 1, 1995, this condition is negated. An application for an operation permit must be submitted to the Department's Central District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the permittee shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the construction permit, and compliance test reports as required by this permit. (Rules 62-4.055 and 62-4.220, F.A.C.)

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Howard L. Rhodes, Director
Division of Air Resources
Management

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- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Mr. Rex Taylor
City Manager, Utilities Director
City of Vero Beach
100 17th Street
Vero Beach, Florida 32960

COMPLETE THIS SECTION ON DELIVERY

A. Received by *(Please Print Clearly)* B. Date of Delivery 4/9

C. Signature
X ☐ Agent ☐ Addressee

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

3. Service Type
☐ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchandise
☐ Insured Mail ☐ C.O.D.

4. Restricted Delivery? *(Extra Fee)* ☐ Yes

2. Article Number *(Copy from service label)*
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PS Form 3811, July 1999 Domestic Return Receipt 102595-99-M-1789

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Mr. Rex Taylor
Street, Apt. No., or PO Box No.
100 17th Street
City, State, ZIP+4
Vero Beach, Florida 32960

PS Form 3800, July 1999 See Reverse for Instructions