

Florida Department of  
Environmental Protection

Memorandum

*al*

TO: Howard L. Rhodes  
THRU: Clair Fancy *CHF*  
FROM: A. A. Linero *aa Linero 2/16*  
DATE: February 16, 1996  
SUBJECT: Re-issued Amended Permit  
Reedy Creek Improvement District  
38 MW Turbine and HRSG with Duct Burner

Attached for your signature is a final re-issued and amended construction permit for a turbine (with HRSG and duct burner) operated by Reedy Creek Improvement District (RCID).

RCID identified operating conditions between full load and half load which result in higher-than-permitted CO emissions. They want to have flexibility to operate under these other conditions but found they would violate their construction permit CO emission limits. Their air construction permit expired some time ago. In accordance with the applicable Guidance we are re-issuing the permit (incorporating the original permit and revisions) with the necessary changes.

The CO increase is not significant with respect to PSD. Emissions of NO<sub>x</sub> will be lower whenever the unit operates at low load and SO<sub>2</sub> will be lower by firing at lower loads. They use water injection for NO<sub>x</sub> control and natural gas for low sulfur dioxide emissions (except when unavailable).

There were several comments received from the Central District and KBN. The requested changes are reflected in the permit conditions, as noted in the Final Determination.

CHF/al/w

Attachments

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**  
 • Complete items 1 and/or 2 for additional services.  
 • Complete items 3, and 4a & b.  
 • Print your name and address on the reverse of this form so that we can return this card to you.  
 • Attach this form to the front of the mailpiece, or on the back if space does not permit.  
 • Write "Return Receipt Requested" on the mailpiece below the article number.  
 • The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):  
 1.  Addressee's Address  
 2.  Restricted Delivery  
 Consult postmaster for fee.

3. Article Addressed to:  
 Thomas Moses, Dist. Adm.  
 Reedy Creek Improv. Dist  
 P O Box 10170  
 Lake Buena Vista, FL  
 32830-0170

4a. Article Number  
 2 127 633 168

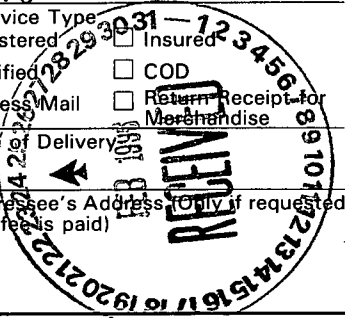
4b. Service Type  
 Registered  Insured  
 Certified  COD  
 Express Mail  Return Receipt for Merchandise

7. Date of Delivery  
 3-11-96

5. Signature (Addressee)

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

6. Signature (Agent)



Thank you for using Return Receipt Service.

Z 127 633 168



**Receipt for Certified Mail**

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

Sent to Thomas Moses	
Street and No. Reedy Creek	
P.O., State and ZIP Code P.O. Box 10170, FL 32830-0170	
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	2-20-96
38 MW Turbine	

Z 127 633 168

**Receipt for Certified Mail**

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

Sent to Edward Godwin	
Street and No. Reedy Creek	
P.O., State and ZIP Code P.O. Box 10000, FL 32830-1000	
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	Resending 3-6-96

PS Form 3800, March 1993

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**  
 • Complete items 1 and/or 2 for additional services.  
 • Complete items 3, and 4a & b.  
 • Print your name and address on the reverse of this form so that we can return this card to you.  
 • Attach this form to the front of the mailpiece, or on the back if space does not permit.  
 • Write "Return Receipt Requested" on the mailpiece below the article number.  
 • The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):  
 1.  Addressee's Address  
 2.  Restricted Delivery  
 Consult postmaster for fee.

3. Article Addressed to:  
 Edward Godwin  
 Reedy Creek Energy Sew.  
 P O Box 10000  
 Lake Buena Vista, FL  
 32830-1000

4a. Article Number  
 2 127 633 180

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

7. Date of Delivery  
 3-11

5. Signature (Addressee)

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

6. Signature (Agent)

Thank you for using Return Receipt Service.



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

## NOTICE OF PERMIT

In the matter of an  
Application for Permit by:

DEP File No. 0950110-001-AC  
Orange County

Mr. Thomas M. Moses, District Administrator  
Reedy Creek Improvement District  
Post Office Box 10170  
Lake Buena Vista, Florida 32830-0170

Attached is the construction permit No. 0950110-001-AC which is a re-issued and amended version of permit No. AC48-137740. It is for the existing 38 MW turbine generator and heat recovery steam generator with duct burner located at the Central Energy Plant in Lake Buena Vista. This permit 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  
904-488-1344

## CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed by certified mail before the close of business on 2-20-96 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 Date 2-20-96

Copies furnished to:  
A. Zahm, CD  
K. Kosky, KBN

Final Determination

Reedy Creek Improvement District  
Central Energy Plant  
Lake Buena Vista, Florida  
Orange County

Gas Turbine and Heat Recovery Steam Generator  
With Duct Burner - GE LM 5000  
38 Megawatts

Permit No. 0950110-001-AC  
Previously AC48-137740

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

February 12, 1996

## Final Determination

On June 22, 1995, an application was received from the Reedy Creek Improvement District (RCID) to modify the construction permit for its 38 megawatt (MW) gas turbine electrical generator with a heat recovery steam generator (HRSG) and duct burner located at the Central Energy Plant in Lake Buena Vista, Orange County. The purpose of the modification is to allow an increase in carbon monoxide (CO) emissions so that the unit may subsequently operate at lower power output levels.

The effect of operating at lower loads is that carbon monoxide emissions may be as high as 110 tons per year (TPY) compared to the previously permitted limit of 48 TPY. However, during those periods, nitrogen oxide (NO<sub>x</sub>) emissions will be lower. If the unit were operated solely at low load (approximately 15 MW), CO emissions would increase by 48 TPY while NO<sub>x</sub> emissions would decrease by over 100 TPY from the presently permitted limit of 337 TPY.

Because RCID wishes to maintain the flexibility to operate at high and low loads, the only change required in the permit is the increase in the limit for CO. The increase in emissions is less than significant with respect to applicability of Prevention of Significant Deterioration (PSD). The unit utilizes water injection for NO<sub>x</sub> control and is fired with natural gas except when it is unavailable.

The Notice of Intent to Issue was published on December 8, 1995 in the Orlando Sentinel. The following comments were received during the 14 day comment period. The Department's response to these comments are also detailed below.

### Comments from Applicant with Department's Response:

A.

*Comment:*

*Preliminary Determination*

Third paragraph; Last Sentence-Replace "steam" with "water". The NO<sub>x</sub> control system uses water injection.

*Response:*

Corrected in final Determination to reflect use of water instead of steam.

B.

*Comment:*

*Specific Condition 1.*

The modifications to the construction permit which were dated February 15, 1991, May 29, 1991, August 13, 1991, and December 15, 1993 have also been issued by the Department. These should be added to the list in the condition.

*Response:*

The list of amendments was deleted since all previous amendments/modifications have been incorporated into the new construction permit.

C.

*Comment:*

*Specific Condition 2.*

1. Nitrogen Oxides: Under the column "Pollutant" the word "avg." under nitrogen oxides should be clarified by adding the word "annual" before "avg.". The original intent of the word average was to calculate and ensure annual average NO<sub>x</sub> emissions meet the 77 lb/hr/337 TPY for gas and 100 lb/hr/17 TPY for oil. This is described by the footnote under the table which states: "The average emissions will be calculated using hourly.....plans." To clarify this condition, the words "annual average" should be used. Also, the wording of the footnote may be somewhat confusing as to whether it applies to both the turbine and duct burner and the mechanism as to how the annual average is calculated. It is recommended that the wording of the footnote be changed to read:  
"The average NO<sub>x</sub> emission from the turbine and duct burner combined will be calculated to obtain monthly average; an annual average is calculated using consecutive monthly averages."
2. Sulfur Dioxide: The sulfur dioxide emissions for gas firing should be 1.2 lb/hr and 5.1 TPY. These emission rates were included in the permit revision dated August 13, 1991 that was issued by the Department.
3. Footnote 1: This footnote was changed by the January 7, 1993 permit amendment issued by the Department to read:  
  
"Fuel oil firing shall be limited to 14 days per year."
4. Footnote 6: It is suggested that the term "NO<sub>x</sub>" be included before "concentration" in this footnote since the footnote only applies to NO<sub>x</sub>. Therefore, the footnote would read: "Variation in NO<sub>x</sub> concentration with variation in ..... results."
5. Bottom footnote: The references to oil should be deleted since oil firing was eliminated by a permit modification and the duct burner unit is not capable of firing oil.

*Response:*

1. Change has been made.
2. Change has been made.
3. Change has been made.
4. Change has been made.
5. Change has been made.

D.

*Comment:*

*Specific Condition 4.*

The Department's memorandum of November 22, 1995 would suggest that testing at intermediate and low loads is unnecessary. The relationships developed in the permit application indicate that CO rises with turbine inlet temperature and varies with load and water to fuel ratio. Since the water to fuel ratio would not be reduced from that in the permit, CO concentrations would not deviate from this relationship. This will be confirmed by the initial compliance tests. Thus, it is suggested that this condition be changes as follows:

"Annual stack testing for CO emissions at full capacity load conditions shall be performed according to an annual test protocol developed jointly by RCID and FDEP. This protocol will specify the test methods and procedures to be used during the annual compliance testing. Using the established procedures of this protocol as a guide, simultaneous testing full capacity load conditions shall be conducted for CO, NO<sub>x</sub> and VE. EPA Method 10 shall be used for CO, EPA Methods 7e or 20 shall be used for NO<sub>x</sub> and EPA Method 9 shall be used for VE. Testing at other loads will not be necessary if the annual compliance test is within the expected CO/NO<sub>x</sub> relationship developed from the initial compliance tests."

*Response:*

Suggested language is incorporated.

**Additional Changes made to the permit by the Department to clarify certain issues.**

The Department changed footnote 6 in specific condition 5 to reflect the requirements in Subpart GG, 40 CFR 60.334 and 60.335.

Footnote 7 was added to the table to clarify that compliance with the SO<sub>2</sub> limitations may be demonstrated by fuel analysis or Method 20 pursuant to Subpart GG.

Footnote 8 was added to clarify that 62-297.340(1)(e) (F.A.C.) provides relief from annual compliance testing for PM when firing liquid fuels for less than 400 hours per year. Specific Condition 2 limits fuel oil operation to less than 400 hrs/yr.

VOC testing has been limited to the initial compliance test since initial test results indicated non-detectable levels of VOC using Method 25A.

The final determination of the Department is to amend and re-issue the construction permit as indicated in the Intent to Issue with the changes indicated above.

The electrical production capacity was corrected to 38 MW for consistency with the original construction permit.



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

**PERMITTEE:**

**Reedy Creek Improvement District  
Post Office Box 10170  
Lake Buena Vista, Florida 32830-0170**

**Permit No: 0950110<sup>1 a</sup>-001-AC**  
**Expiration Date: July 1, 1996**  
**County: Orange**  
**Latitude/Longitude: 28°25'30"N 81°35'10"W**  
**Project: GE Gas-Fired Turbine with Heat  
Recovery System**

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.). It replaces and amends previously issued permit No. AC48-137740 dated March 3, 1988 and revisions thereto. 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 and specifically described as follows:

For the construction of a 38 MW GE LM 5000 gas or oil-fired turbine generator system with a heat input capacity of 450 MMBtu/hr. The project includes a gas-fired duct burner, heat recovery boiler and steam turbine, at the Central Energy Plant at Bay Lake near Lake Buena Vista, Orange County, Florida. The unit will be operated at low and intermediate load conditions as well as the previously permitted base load condition.

Construction will be in accordance with the permit application and plans, documents, and reference material submitted unless otherwise stated in the general and specific conditions herein.

Attachments are listed below:

1. Original permit AC48-137740 dated March 3, 1988.
2. Amendments/extensions/revisions of original permit dated 9/14/88, 5/17/89, 11/13/89, 1/15/91, 2/15/91, 5/29/91, 8/13/91, 1/7/93, 10/29/93, 12/15/93, 3/30/95, 6/16/95
3. RCID's application received June 22, 1995.
4. DEP letter requesting additional information dated July 6, 1995.
5. RCID's response received August 25, 1995.
6. RCID's Waiver of 90 Day Time Limit received November 9, 1995.
7. DEP's Draft Amended Permit Issued November 30, 1995.
8. RCID's Letter and Proof of publication received December 20, 1995.
9. KBN's comments to the Draft Amended Permit.



**Permittee:**  
**Reedy Creek Improvement District**

**Permit Number:** 0950110-001-AC  
**Expiration Date:** July 1, 1996

**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 this 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 and 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 credentials or other documents as may be required by law and at reasonable times, 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 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.

**Permittee:**  
**Reedy Creek Improvement District**

**Permit Number:** 0950110-001-AC  
**Expiration Date:** July 1, 1996

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.

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:

- ( ) Determination of Best Available Control Technology (BACT)
- ( ) Determination of Prevention of Significant Deterioration (PSD)
- ( X ) Compliance with New Source Performance Standards (NSPS)

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 his 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.

**Permittee:**  
**Reedy Creek Improvement District**

**Permit Number:** 0950110-001-AC  
**Expiration Date:** July 1, 1996

- 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;
  - the results of such analyses.

**SPECIFIC CONDITIONS:**

1. The turbine may operate continuously (8760 hr/yr).
2. Natural gas shall be the primary fuel fired in the turbines and duct burner system. No. 2 fuel oil can be used as a backup fuel in the turbine only for up to 14 days per year.
3. The maximum heat input to the turbine and the duct burner combined shall not exceed 450 MMBtu/hr (normal duct burner heat input rate of 23 MMBtu/hr).
4. When the gas turbine is not in operation, the duct burner heat input may be increased up to, but not to exceed, 198 MMBtu/hr.
5. The emissions, from the turbine and duct burner combined, shall not exceed:

Pollutant	Gas-fired lb/hr	TPY <sup>2</sup>	Oil Fired <sup>1</sup> lb/hr	TPY
Nitrogen Oxides (NO <sub>x</sub> ) peak based on 40°F annual average <sup>3</sup>	112		132	
	77	337	100	17
Sulfur Dioxide (SO <sub>2</sub> ) <sup>7</sup>	1.2	5.1	118	20
Particulates (PM) <sup>8</sup>	0.8	3.5	9	2
Carbon Monoxide (CO) peak load <sup>4</sup> reduced load <sup>4</sup>	11		24	4
	25	110	N/A <sup>5</sup>	N/A <sup>5</sup>
Volatile Organic Compounds (VOCs) <sup>8</sup>	6	26	6	1
Visible Emissions (VE)	5% Opacity		10% Opacity	
NO <sub>x</sub> @ 15% O <sub>2</sub> dry basis peak average <sup>3</sup>	74 ppmv		82 ppmv <sup>6</sup>	
	58 ppmv		68 ppmv	
SO <sub>2</sub> @ 15% oxygen dry basis <sup>7</sup>	--		58 ppmv	

<sup>1</sup> Fuel oil firing shall be limited to 14 days per year.  
<sup>2</sup> TPY (tons per year)  
<sup>3</sup> The 12 month rolling average emissions will be calculated using hourly averages during the month and then using consecutive monthly averages to obtain an annual average. The DEP District office may alter this averaging method after due consideration of alternative compliance plans.  
<sup>4</sup> Reduced load is 15.0 MW - 29.0 MW. Peak Load is above 29.0 MW.  
<sup>5</sup> When the turbine is oil-fired it shall not be operated at reduced load conditions.  
<sup>6</sup> Variation in NO<sub>x</sub> concentration with variation in water to fuel ratios shall be documented by a plot of pollutant concentration versus water to fuel ratios, as per the most recent 4 load compliance test results.  
<sup>7</sup> Subsequent to initial compliance tests, compliance may also demonstrated by fuel analysis pursuant to 40 CFR 60.333  
<sup>8</sup> Initial compliance test only.  
The duct burner NO<sub>x</sub> emissions shall not exceed (corresponding to 0.2 lb/MMBtu) 4.6 lb/hr for gas at 23 MMBtu heat input or 40 lb/hr for gas at 198 MMBtu/hr.

**Permittee:**  
**Reedy Creek Improvement District**

**Permit Number:** 0950110-001-AC  
**Expiration Date:** July 1, 1996

6. The No. 2 oil sulfur content shall not exceed 0.4 percent.

7. In accordance with Rule 62-210.300(3) F.A.C., the Black Start Cummings No. 2 fuel oil fired emergency electric generator is exempt from permitting requirements

Pursuant to Rule 62-210.300(3), F.A.C., this source, although exempt from permitting requirements of Chapter 62-210 and Chapter 62-4, F.A.C., "shall be subject to any applicable emission standard specified in Rule 62-252.300, and 62-296, F.A.C., other than Best Available Control Technology (BACT) or Lowest Achievable Emission Rate (LAER) requirements."

Furthermore, pursuant to Rule 62-213.420(3) (m), F.A.C., this source, is required to be included in the Title V operation permit application.

8. Water injection shall be utilized for NO<sub>x</sub> control at a minimum of 0.6/1.0 water to fuel ratio. If compliance testing warrants this ratio to be re-investigated, the ratio at which compliance is maintained shall be incorporated into the permit.

9. Pursuant to Rule 62-297.340, F.A.C., Frequency of Compliance Tests, initial and annual compliance testing shall be conducted with the fuels used in the preceding 12 month period using:

1. EPA Method 20 for NO<sub>x</sub> and SO<sub>2</sub> (fuel sulfur analysis may be used for SO<sub>2</sub>)
2. EPA Method 10 for CO
3. EPA Method 9 for VE

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

10. The proposed project shall comply with all the applicable requirements of:

- a) Chapter 62-4, and 62-210 through 62-297, F.A.C.
- b) 40 CFR 60; Subpart GG, Gas Turbines

11. DEP's district office shall be notified in writing at least 15 days prior to source testing. Written reports of the tests shall be submitted to the district office within 45 days of test completion.

The construction shall reasonably conform to the plans and schedule submitted in the application. If the permittee is unable to complete construction on schedule, the Department must be notified in writing 60 days prior to the expiration of the construction permit and submit a new schedule and request for an extension of the construction permit (Rule 62-2, F.A.C.).

To obtain a permit to operate, the permittee must demonstrate compliance with the conditions of the construction permit and submit a complete application for an operating permit, including the application fee, along with compliance test results and a Certificate of Completion, to the Department's District office 90 days prior to the expiration date of the construction permit. The permittee may continue to operate in compliance with all terms of the construction permit until its expiration date. Operation beyond the construction permit expiration date requires a valid permit to operate (Rules 62-2 and 62-4, F.A.C.).

**Permittee:**  
**Reedy Creek Improvement District**

**Permit Number:** 0950110-001-AC  
**Expiration Date:** July 1, 1996

If the construction permit expires prior to the permittee requesting an extension or obtaining a permit to operate, then all activities at the project must cease and the permittee must apply for a new permit to construct which can take up to 90 days to process a complete application (Rule 62-4, F.A.C.).

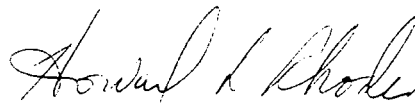
12. Any change in the method of operation, fuels, equipment or operating hours shall be submitted for approval to DEP's District office.

13. During the new turbine debugging period, not to exceed nine months, the older Orenda power trains shall not be fired unless the new GE turbine is not in operation. After the debugging period is over, the Orenda turbines and their associated equipment shall be dismantled.

14. An initial compliance test shall be conducted in order to obtain the air operation permit for the modification. This test will consist of testing CO emissions at peak, two intermediate and low load conditions. Test day peak load based on BTU input will be established based on the operating limits of the unit during the test day. Intermediate loads shall be established based on equally spaced points between peak and low load levels. Initial compliance testing at all load conditions will be conducted with the duct burners operating. If compliance with the proposed emission rate is demonstrated during this initial compliance test, revised annual CO compliance test procedures will be incorporated as part of the annual stack test protocol.

15. Subsequent to the initial test, annual stack testing for CO emissions at full capacity load conditions shall be performed according to an annual test protocol developed jointly by RCID and FDEP. This protocol will specify the test methods and procedures to be used during the annual compliance testing. Using the established procedures of this protocol as a guide, simultaneous testing full capacity load conditions shall be conducted for CO, NO<sub>x</sub> and VE. EPA Method 10 shall be used for CO, EPA Methods 7e or 20 shall be used for NO<sub>x</sub> and EPA Method 9 shall be used for VE. Testing at other loads will not be necessary if the unit is shown to be in compliance with the applicable emission standards for NO<sub>x</sub> and CO and the annual compliance test emissions data is within the expected CO/NO<sub>x</sub> relationship developed from the initial compliance tests.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION



Howard L. Rhodes, Director  
Division of Air Resources Management