

Florida Department of Environmental Regulation

Central District • Lawton Chiles, Governor

3319 Maguire Boulevard, Suite 232 • Orlando, Florida 32803-3767

Carol M. Browner, Secretary

Reedy Creek Improvement District Post Office Box 36 Lake Buena Vista, Florida 32830

Attention: Thomas M. Moses, District Administrator

Orange County - AP GE Gas Fired Turbine Generator with Heat Recovery System Permit No. A048-170280 Change of Conditions

Dear Mr. Moses:

We are in receipt of your request for a change of the permit conditions. The conditions are changed as follows:

CONDITION

Permit Specific Condition No. 9

FROM:

- Annual compliance testing conducted annually from the date of February 1, 1989 shall be conducted with the fuels used in the preceeding 12 month period using:
 - 1. EPA Method 20 for NO_x and SO_2
 - 2. EPA Method 10 for CO
 - 3. EPA Method 5 for PM
 - EPA Method 9 for VE

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

TO:

- Annual compliance testing conducted annually from the date of February 1, 1989 shall be conducted with the fuels used in the preceeding 12 month period using:
 - 1. EPA Method 20 for NO_x and SO_2
 - 2. EPA Method 10 for CO
 - 3. EPA Method 17 for PM
 - 4. EPA Method 9 for VE

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

All other conditions remain the same.

This letter must be attached to your permit and becomes a part of that permit.

A. Alexander, P.E.

Deputy Assistant Secretary



Florida Department of Environmental Regulation

Central District •

3319 Maguire Boulevard, Suite 232

Orlando, Florida 32803-3767

Lawton Chiles, Governor

Carol M. Browner, Secretary

Reedy Creek Improvement District Post Office Box 10,170 Lake Buena Vista. Florida 32830-0170

Attention: Thomas M. Moses, District Administrator

Orange County - AP GE Gas Fired Turbine Generator with Heat Recovery System Permit No. A048-170280 Change of Conditions

Dear Mr. Moses:

We are in receipt of your request for a change of the permit conditions. The permit conditions are changed as follows:

Specific Condition No. 5

The only change affects sulfur dioxide (SO_2) under "Gas Fired", in which the maximum allowable emissions limit is changed from 0.2 lb/hr and 0.8 TPY to 1.2 lbs/hr and 5.1 TPY.

All other conditions remain the same.

This letter must be attached to your permit and becomes a part of that permit.

Sincerely

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Alexander, District Director

Date

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Copies to:

Edward Godwin, P.E.

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Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400 Lawton Chiles, Governor Carol M. Browner, Secretary

May 29, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Thomas M. Moses, District Administrator Reedy Creek Improvement District P. O. Box 10170 Lake Buena Vista, Florida 32830

Re: AC 48-137740 - Gas Turbine/HRSG/Duct Burner AC 48-105243 - EPCOT Diesel Generator No. 1

AC 48-106650 - EPCOT Diesel Generator No. 2

Dear Mr. Moses:

The Department is in agreement with your request received March 5, 1991, for increasing the sulfur dioxide emission limit when firing natural gas in the gas turbine/HRSG located at Central Energy plant at Bay Lake and also increasing the carbon monoxide emission limit from the two diesel generators at the EPCOT Center referenced above. The Department will make the following changes:

AC 48-137740
Gas Turbine and Heat Recovery Steam
Generator with Duct Burner

Specific Condition No. 5

The only change affects sulfur dioxide (SO_2) under "Gas Fired," in which the maximum allowable emissions limit is changed from 0.2 lb/hr and 0.8 TPY to 1.2 lbs/hr and 5.1 TPY.

AC 48-105243
EPCOT Center Diesel Generator No. 1

Specific Condition No. 2

The only change affects carbon monoxide, in which the maximum allowable emissions rate is changed from 1.5 lb/hr to 3.0 lbs/hr.



Mr. Thomas M. Moses Page 2 of 2

AC 48-106650 EPCOT Center Diesel Generator No. 2

Specific Condition No. 2

The only change affects carbon monoxide, in which the maximum allowable emissions rate is changed from 1.5 lb/hr to 3.0 lbs/hr.

All other conditions for the three permits referenced above remain as issued. This letter must be attached to each permit and shall become a part of the permits.

Sincerely

STEVE SMALLWOOD, P.

Director

Division of Air Resources Management

SS/MB/plm

c: C. Collins, Central Dist.

E. Godwin, P.E., RCES

K. F. Kosky, P.E., KBN

SENDER: Complete items 1 and 2 when addition 3 and 4. Put your address in the "RETURN TO" Space on the rever from being returned to you. The return receipt fee will provious the date of delivery. For additional fees the following serviand check box(es) for additional service(s) requested. 1. Show to whom delivered, date, and addressee's (Extra charge)	se sid. Failure to do this will prevent this card de you the name of the person delivered to and ces are available. Consult postmaster for fees'
3. Article Addressed to: Mr. Dhomao Mr. Maseo Reldy Creek Improvement District P. D. BOK St. Lake Buena Vista, F-1 32830	4. Article Number P 407 853 42 Type of Service: Registered Insured Cortified COD Express Mail Return Receipt for Merchandise Always obtain signature of addressee or agent and DATE DELIVERED.
5. Signature — Addressee X —— 6. Signature — Agent X 7. Date of Delivery 1—28-4/	8. Addressee's Address (ONLY if requested and fee paid)
PS Form 3811, Apr. 1989 + U.S.G.P.O. 1989-238-1	DOMESTIC RETURN RECEIPT

P 407 853 142

RECEIPT FOR CERTIFIED MAIL
NO INSUPANCE COVERAGE PROVIDED
NOT FOR INTERNATIONAL MAIL (See Reverse)

., U.S.G.P.O. 1989-234-555	Send to AND AND AND P.O. State on ZIP Age P.O. State on ZIP Age Postage	DED' ID FI			
	Certified Fee				
	Special Delivery Fee				
	Restricted Delivery Fee				
10	Return Receipt showing to whom and Date Delivered				
198	Return Receipt snowing to whom, Date, and Address of Delivery				
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3800	Postmark or Date 1-35				
PS Form 3800, June 1985	AC 48-137740				



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400 Lawton Chiles, Governor Carol Browner, Secretary

January 15, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Thomas M. Moses Reedy Creek Improvement District Post Office Box 36 Lake Buena Vista, Florida 32830

Dear Mr. Moses:

The Department received your request for modification of the construction permit referenced below. The request is acceptable and the following shall be changed:

Project: AC 48-137740

FROM:

- 9. Initial and annual compliance testing shall be conducted with the fuels used in the preceeding 12 month period using:
- 1. EPA Method 29 for NOx and SO2
- 2. EPA Method 10 for CO
- 3. EPA Method 5 for PM
- 4. EPA Method 9 for VE

Other DER approved methods may be used for compliance testing only after prior Departmental approval. The compliance protocol shall be worked out with DER's District office prior to initial compliance tests.

TO:

- 9. Initial and annual compliance testing shall be conducted with the fuels used in the preceeding 12 month period using:
- 1. EPA Method 29 for NOx and SO2
- 2. EPA Method 10 for CO
- 3. EPA Method 17 for PM
- EPA Method 9 for VE

Other DER approved methods may be used for compliance testing only after prior Departmental approval. The compliance protocol shall be worked out with DER's District office prior to initial compliance tests.

Mr. Thomas M. Moses Page 2 of 2

Attachment to be Incorporated:

Letter from Reedy Creek Energy Services dated January 9, 1991, requesting a change in the particulate matter test method.

This letter must be attached to your construction permit, AC 48-137740, and shall become a part of that permit.

Sincerely,

STEVE SMALLWOOD, P.E

Mrector

Division of Air Resources

Management

SS/JR/plm

c: C. Collins, Central District

H. Culp, P.E.

B. Bealls, EPA

M. Flores, NPS



State of Florida DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Then The Addressee				
То	Location			
ъ	Location.			
То	Location:			
From:	Date:			

Interoffice Memorandum

TO: Steve Smallwood

FROM: Clair Fancy CHS

DATE: January 15, 1991

SUBJ: Amendment to Construction Permit AC 48-137440

Reedy Creek Improvement District

Attached for your approval and signature is a letter modifying the particulate matter test method for the above referenced construction permit.

The Bureau recommends approval of this amendment.

CF/JR/plm

Attachment



REEDY CREEK ENERGY SERVICES, INC.

P.O. BOX 10,000 • LAKE BUENA VISTA, PLORIDA 32830-1000 (407) 824-4024

January 9, 1991

Mr. Barry Andrews, P.E. Division of Air Florida Department of Environmental Regulation Twin Towers Office Building 2600 Blair Stone Road Tallahassee, FL 32399-2400

FDER Permit A048-170280 and AC48-137740

Dear Mr. Andrews:

Reedy Creek Energy Services, Inc. is the Engineer and Operator of the Reedy Creek Improvement District 30.8 MW gas-fired turbine generator constructed and operated under the above-referenced permits.

On December 14, 1990, Ready Creek Improvement District requested by letter that you change Specific Condition #9-01 the construction permit to allow use of EPA Method 17 for particulate matter in lieu of the stipulated Elea Method : - Mr. Charles At that time, you were kind enough to provide Mar. Charles. - Collins of the Central District with a verbal approval so - approvalso that an enforcement-related particulate test could be - could be _ 7 m. obtaid on December 21, 1990.

Collins

At this em issions Collins

- annual - time, we are attempting to conduct an annual - 1991. Mr. - and froms test of the facility on 11 January, 199. - Collins has informed me, however, that without your white - written modification to the construction permit allowing use of a - of EPA Method 17, he must enforce the use of EPA Method 5.

lam legursting - I am measuresting that you modify the permit specific condition #9 as requested and inform Mr. Collins by fax so that we may proceed with the compliance test on Friday, (1) January, as scheduled.

> -call me at If you have any questions or comments, please call me at (407) 824-4943. My telefax number is (407) 824-4529. We appreciate your assistance in this matter.

Sincerely

Edward Godwin, P.E.

Chief Mechanical Engineer

EG/fw

cc: Charles Collins, W.E.

TELECOPIER COVER SHEET

DATE:	1/09/9/	
TO:	BARRY ANDREWS, R.E.	TELECOPIER # 904 - 922 - 6979
FROM:	EO GODWIN, P.E.	TELECOPIER # 407 - FZY - 4552
RE: 4	CIOPROUS PERMIT NO	AC48-137740/1048-170286
		·
Specia	il Instructions: THANK YO	4 FOR YOUR ASSISTANCE.
		
If you possib	propriete and of these page pie: <u>407 - チェソーソアソフ</u>	s, please call back as soon as
TOTAL	NUMBER OF PAGES BEING SENT 4 I	NCLUDING THIS PAGE.



December 14, 1990

Mr. Barry Andrews, P.E. Division of Air Florida Department of Environmental Regulation Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Re: FDER Permit A048-170280 and AC48-137740

Dear Mr. Andrews:

Reedy Creek Improvement District operates a 30.8MW gas fired turbine generator in a combined-cycle configuration under operating permit A048-170280. During the first annual compliance test, performed March 14, 1990, it was discovered that the facility was not meeting permitted limits for Particulate Matter (PM) and Volatile Organic Compounds (VOC). Subsequently, in September, the Central District issued a Warning Notice for non-compliance for these two emissions. Meetings with Mr. Charles Collins and Reedy Creek Improvement District were held to discuss the Warning Notice. RCID chose to pursue an informal solution that involved submission of a Remediation Plan to the Central District. The Remediation Plan was accepted and RCID has been investigating the performance of the facility and the potential causes of the March emission results.

Research stack emission tests performed on September 21 and again on December 3 indicated that the facility is operating within permit limits for VOC. The facility's emissions of particulate matter exceed the permitted value using EPA Method 5 in accordance with Permit Specific Condition #9. Using EPA Method 17, however, particulate matter emissions are well within the permit limit. These test results are listed in Attachment 1.

We have notified the Central District of our desire to perform a Compliance Test on December 21 to demonstrate that the facility operates within permitted emission values for PM and VOC using EPA Methods 17 and 25A. Mr. Collins has informed me that in order to substitute Nethod 17 in lieu of Method 5, approval for the change to the construction and operating permits is required from your office.

Reedy Creek Improvement District hereby requests your

Mr. Barry Andrews, P.E. December 14, 1990 Page 2

favorable consideration of the following modification to AC48-137740 and AC48-170280.

Change Specific Condition #9, Item 3 to:

"EPA Method 17 for PM"

If you concur with this request, please inform Mr. Charles Collins of the Central District as soon as possible so that we may proceed with demonstrating compliance on December 21. If you have any questions or comments, please call me at (407) 828-2241. My telefax number is (407) 828-8096. We appreciate your assistance in this matter.

Sincerely,

Thomas M. Moses

District Administrator

EG/TMM/fjw

Attachment

cc: Charles Collins, P.E.

bcc: Janice Adkins

Ed Godwin
Frank Jones
Bob Kindle
Bob Kohl
Renn Kosky
Ray Maxwell
Bob Penn

Willard Smith

ATTACHHENT 1

Ready Creek Improvement District Combined Cycle Gas Turbine Facility Construction Permit #AC48-137740 Operating Permit #A048-170280

Particulate Emissions (PM) Permit Limits:

0.8 lb/hr

Volatile Organic Compounds (VOC) Permit Limits: 6.0 lb/hr

TEST RESULTS (1b/hr)

		Permit	21 Sept., 1990	3 December, 1990
FM (Metho PM (Metho VOC	(Method 5)	0.8	1.8 0.5	1.56 0.31
	•	6.0	0.0	0.31