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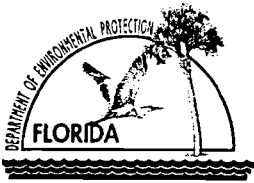
JUL 03 2002

BUREAU OF AIR REGULATION

**ORANGE COGENERATION, L.P., INC.
ORANGE COGENERATION FACILITY
RENEWAL APPLICATION
TITLE V OPERATING PERMIT**

Prepared By:
Foster Wheeler Environmental Corporation
759 South Federal Highway, Suite 100
Stuart, FL 34994-2396

Prepared For:
CSW Energy, Inc. Operations
Orange Cogeneration Facility
1901 Clear Springs Road
Bartow, FL 33831



Department of Environmental Protection

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Division of Air Resource Management
RESPONSIBLE OFFICIAL NOTIFICATION FORM

BUREAU OF AIR REGULATION

Note: A responsible official is not necessarily a designated representative under the Acid Rain Program. To become a designated representative, submit a certificate of representation to the U.S. Environmental Protection Agency (EPA) in accordance with 40 CFR Part 72.24.

Identification of Facility

1. Facility Owner/Company Name: Orange Cogeneration Limited Partnership
2. Site Name: Orange Cogeneration Facility 3. County: Polk
4. Title V Air Operation Permit/Project No. (leave blank for initial Title V applications): 1050231-001-AV

Notification Type (Check one or more)

≤ INITIAL: Notification of responsible officials for an initial Title V application.
X RENEWAL: Notification of responsible officials for a renewal Title V application.
≤ CHANGE: Notification of change in responsible official(s). Effective date of change in responsible official(s)

Primary Responsible Official

1. Name and Position Title of Responsible Official: Allen Wade Smith, General Manager
2. Responsible Official Mailing Address: Organization/Firm: Orange Cogeneration, L.P., Inc. Street Address: 1125 US 98 South, Suite 100 City: Lakeland State: FL Zip Code: 33801
3. Responsible Official Telephone Numbers: Telephone: (863) 682 - 6338 Fax: (863) 683 - 8257
4. Responsible Official Qualification (Check one or more of the following options, as applicable): [] For a corporation... [X] For a partnership... [] For a municipality... [] The designated representative...
5. Responsible Official Statement: I, the undersigned, am a responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this notification. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this notification are true, accurate and complete. Further, I certify that I have authority over the decisions of all other responsible officials, if any, for purposes of Title V permitting.
Signature: [Handwritten Signature] Date: 7/1/02

Additional Responsible Official

1. Name and Position Title of Responsible Official: <p style="text-align: center;">Mr. Don Walters, Plant Manager</p>
2. Responsible Official Mailing Address: Organization/Firm: CSW Energy, Inc., Operations Street Address: 1901 Clear Springs Road City: Bartow State: FL Zip Code: 33830
3. Responsible Official Telephone Numbers: Telephone: (863) 534 - 1141 Fax: (863) 533 - 4152
4. Responsible Official Qualification (<i>Check one or more of the following options, as applicable</i>): <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input checked="" type="checkbox"/> The designated representative at an Acid Rain source.

Additional Responsible Official

1. Name and Position Title of Responsible Official:
2. Responsible Official Mailing Address: Organization/Firm: Street Address: City: State: Zip Code:
3. Responsible Official Telephone Numbers: Telephone: () - Fax: () -
4. Responsible Official Qualification (<i>Check one or more of the following options, as applicable</i>): <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source.

SECTION I. APPLICATION INFORMATION



Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: Orange Cogeneration Limited Partnership	
2. Site Name: Orange Cogeneration Facility	
3. Facility Identification Number: 1050231 [] Unknown	
4. Facility Location: Cogeneration Facility Street Address or Other Locator: 1901 Clear Springs Road City: Bartow County: Polk Zip Code: 33830	
5. Relocatable Facility? [] Yes [X] No	6. Existing Permitted Facility? [X] Yes [] No

Application Contact

1. Name and Title of Application Contact: Allan Wade Smith, General Manager	
2. Application Contact Mailing Address: Organization/Firm: Orange Cogeneration, L.P., Inc. Street Address: 1125 US 98 South, Suite 100 City: Lakeland State: FL Zip Code: 33801	
3. Application Contact Telephone Numbers: Telephone: (863) 682 - 6338 Fax: (863) 683 - 8257	

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

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Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

Initial Title V air operation permit for an existing facility which is classified as a Title V source.

Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: _____

Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: _____

Operation permit number to be revised: _____

Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)

Operation permit number to be revised/corrected: _____

Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit number to be revised: 1050231-001-AV

Reason for revision: Permit Renewal

Air Construction Permit Application

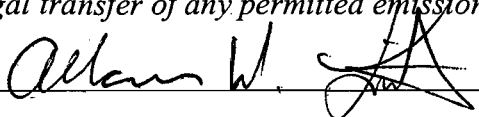
This Application for Air Permit is submitted to obtain: (Check one)

Air construction permit to construct or modify one or more emissions units.

Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Air construction permit for one or more existing, but unpermitted, emissions units.

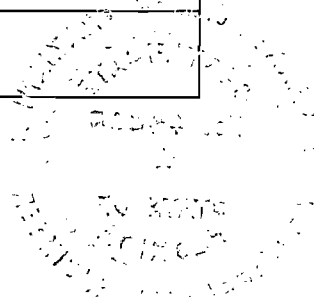
Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official: Allan Wade Smith, General Manager
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Orange Cogeneration L.P., Inc. Street Address: 1125 US 98 South, Suite 100 City: Lakeland State: FL Zip Code: 33801
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (863) 682 - 6338 Fax: (863) 683 - 8257
4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative*(check here [X], if so) or the responsible official (check here [X], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i> Signature: <u></u> Date: <u>7/1/02</u>

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: Darrel James Graziani Registration Number: 44685
2. Professional Engineer Mailing Address: Organization/Firm: Foster Wheeler Environmental Corporation Street Address: 749 South Federal Highway, Suite 100 City: Stuart State: FL Zip Code: 34994-2936
3. Professional Engineer Telephone Numbers: Telephone: (772) 781 - 3413 Fax: (772) 781 - 3411



4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [X], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [X], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Daniel G. Grij

Signature

June 22, 2002

Date

Attach any exception to certification statement.



Construction/Modification Information

1. Description of Proposed Project or Alterations:

Title V Operating Permit Renewal and a requested minor modification to the Construction Permits. The details of the minor modification are discussed in Attachment OC-FI-006.

2. Projected or Actual Date of Commencement of Construction: N/A

3. Projected Date of Completion of Construction: N/A

Application Comment

This application includes a minor modification of PSD-FL-206A, and AC53-233851A and renewal of the Title V Operating and Acid Rain permits.

SECTION II. FACILITY INFORMATION

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: ° Zone: 17 East (km): 418.7 North (km): 3083.0			
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): 27° 52' 15" Longitude (DD/MM/SS): 81° 49' 31"			
3. Governmental Facility Code: 0	4. Facility Status Code: A	5. Facility Major Group SIC Code: 49	6. Facility SIC(s): 4911
7. Facility Comment (limit to 500 characters): <p>This facility includes two (2) 41.4 MW combustion turbines (CTs) each equipped with a Heat Recovery Steam Generator (HRSG) and one Auxiliary Boiler. The emissions units are permitted to fired natural gas or biogas. Also included in this application are miscellaneous unregulated/insignificant emissions units and/or activities. Based on the current emission estimates, this facility is not a major source of hazardous air pollutants (HAPs).</p>			

Facility Contact

1. Name and Title of Facility Contact: Don Walters, Plant Manager			
2. Facility Contact Mailing Address: Organization/Firm: CSW Energy, Inc. Operations Street Address: 1901 Clear Springs Road City: Bartow State: FL Zip Code: 33830			
3. Facility Contact Telephone Numbers: Telephone: (863) 534 - 1141 Fax: (863) 533 - 4152			

Facility Regulatory Classifications

Check all that apply:

1. <input type="checkbox"/> Small Business Stationary Source?	<input type="checkbox"/> Unknown
2. <input checked="" type="checkbox"/> Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
3. <input type="checkbox"/> Synthetic Minor Source of Pollutants Other than HAPs?	
4. <input type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)?	
5. <input type="checkbox"/> Synthetic Minor Source of HAPs?	
6. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS?	
7. <input type="checkbox"/> One or More Emission Units Subject to NESHAP?	
8. <input type="checkbox"/> Title V Source by EPA Designation?	
9. Facility Regulatory Classifications Comment (limit to 200 characters): <p>The facility is a listed major source category and classified as a new major source under the PSD program with allowable emissions of CO and NO_x greater than 100 tons per year. The combustion turbines are subject to the NSPS of 40 CFR 60 Subpart GG and BACT for NO_x, CO, PM/PM10, VOC and visible emissions. The auxiliary boiler is a 40 CFR 60 Subpart Dc unit and subject to BACT for NO_x, CO, PM/PM10, VOC and SO₂.</p>	

List of Applicable Regulations

Rule 62-4.020, F.A.C.	Rule 62-4.030, F.A.C.
Rule 62-4.040(1), F.A.C.	Rule 62-4.050(1), (2), (3), (4)(a)1., (4)(v), F.A.C.
Rule 62-4.050(5) – (8), F.A.C.	Rule 62-4.055(1) – (5), F.A.C.
Rule 62-4.070, F.A.C.	Rule 62-4.090, F.A.C.
Rule 62-4.100, F.A.C.	Rule 62-4.120(1) & (5), F.A.C.
Rule 62-4.130, F.A.C.	Rule 62-4.150, F.A.C.
Rule 62-4.160, F.A.C.	Rule 62-4.210, F.A.C.
Rule 62-4.220, F.A.C.	Rule 62-204.200, F.A.C.
Rule 62-204.800(2), F.A.C.	Rule 62-204.800(7)(a), (c), (d), & (e), F.A.C.
Rule 62-204.800(9)(a), (b)8., (c), (d), & (e), F.A.C.	Rule 62-204.800(10)(a), (b)9., (c) & (e), F.A.C.
Rule 62-204.800(13), F.A.C.	Rule 62-204.800(13), F.A.C.
Rule 62-204.800(15), F.A.C.	Rule 62-204.800(16), F.A.C.
Rule 62-204.800(17), F.A.C.	Rule 62-204.800(19), F.A.C.
Rule 62-204.800(22)(e), F.A.C.	Rule 62-210.200, F.A.C.
Rule 62-210.300(1), (2), (2)(a), F.A.C.	Rule 62-210.300(3)(a), (a)9, 10, 11, 12, 15, 20, 21, F.A.C.

List of Applicable Regulations

Rule 62-210.300(3)(a)22, 26, 30, 31, 32, F.A.C.	Rule 62-210.300(3)(b)1., F.A.C.
Rule 62-210.350(1), (2), (3), F.A.C.	Rule 62-210.360(1), F.A.C.
Rule 62-210.370(3)(a) & (c), F.A.C.	Rule 62-210.550, F.A.C.
Rule 62-210.650, F.A.C.	Rule 62-210.700, F.A.C., except (2) & (3)
Rule 62-210.900(1), (1)(a), (5) & (7), F.A.C.	Rule 62-212.300, F.A.C.
Rule 62-212.400, F.A.C.	Rule 62-213.205(1) & (4), F.A.C.
Rule 62-213.400, F.A.C.	Rule 62-213.410, F.A.C.
Rule 62-213.412, F.A.C., except (3)	Rule 62-213.413(1), (2) & (3) F.A.C.
Rule 62-213.420, F.A.C.	Rule 62-213.430(3), (4) & (6), F.A.C.
Rule 62-213.440, F.A.C.	Rule 62-213.460, F.A.C.
Rule 62-213.900(1), (6) & (7), F.A.C.	Rule 62-214.300, F.A.C.
Rule 62-214.320(1)(I) & (2), F.A.C.	Rule 62-214.330(1), (1)(a), F.A.C.
Rule 62-214.350, F.A.C., except (4)	Rule 62-214.370(1), (3) & (4), F.A.C.
Rule 62-214.420, F.A.C.	Rule 62-214.430(1), (2)(a) & (3), F.A.C.
Rule 62-296.320(1), (2); (3), (4)(b) & (4)(c), F.A.C.	Rule 62-256.200, F.A.C.
Rule 62-256.300, F.A.C.	Rule 21-256.600, F.A.C
Rule 62-256.700(3), (4) & (5), F.A.C.	Rule 62-257.200, F.A.C.
Rule 62-257.301, F.A.C.	Rule 62-257.400, F.A.C.
Rule 62-257.900, F.A.C.	40 CFR 52.21
40 CFR 52.27	40 CFR 60.1 (a), (b) & (c)
40 CFR 60.2	40 CFR 60.3
40 CFR 60.4(a) & (b)(K)	40 CFR 60.7
40 CFR 60.8	40 CFR 60.11
40 CFR 60.12	40 CFR 60.13
40 CFR 60.14	40 CFR 60.15
40 CFR 60.17	40 CFR 60.19
40 CFR Part 61, Subpart M	40 CFR 64.1
40 CFR 64.2	40 CFR Part 70
40 CFR Part 68	40 CFR Part 73
40 CFR Part 72	40 CFR Part 77
40 CFR Part 75	

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap		4. Basis for Emissions Cap	5. Pollutant Comment
		lb/hour	tons/year		
NO_x	A				
CO	A				
SO₂	B				
VOC	B				
PM	B				
PM10	B				

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

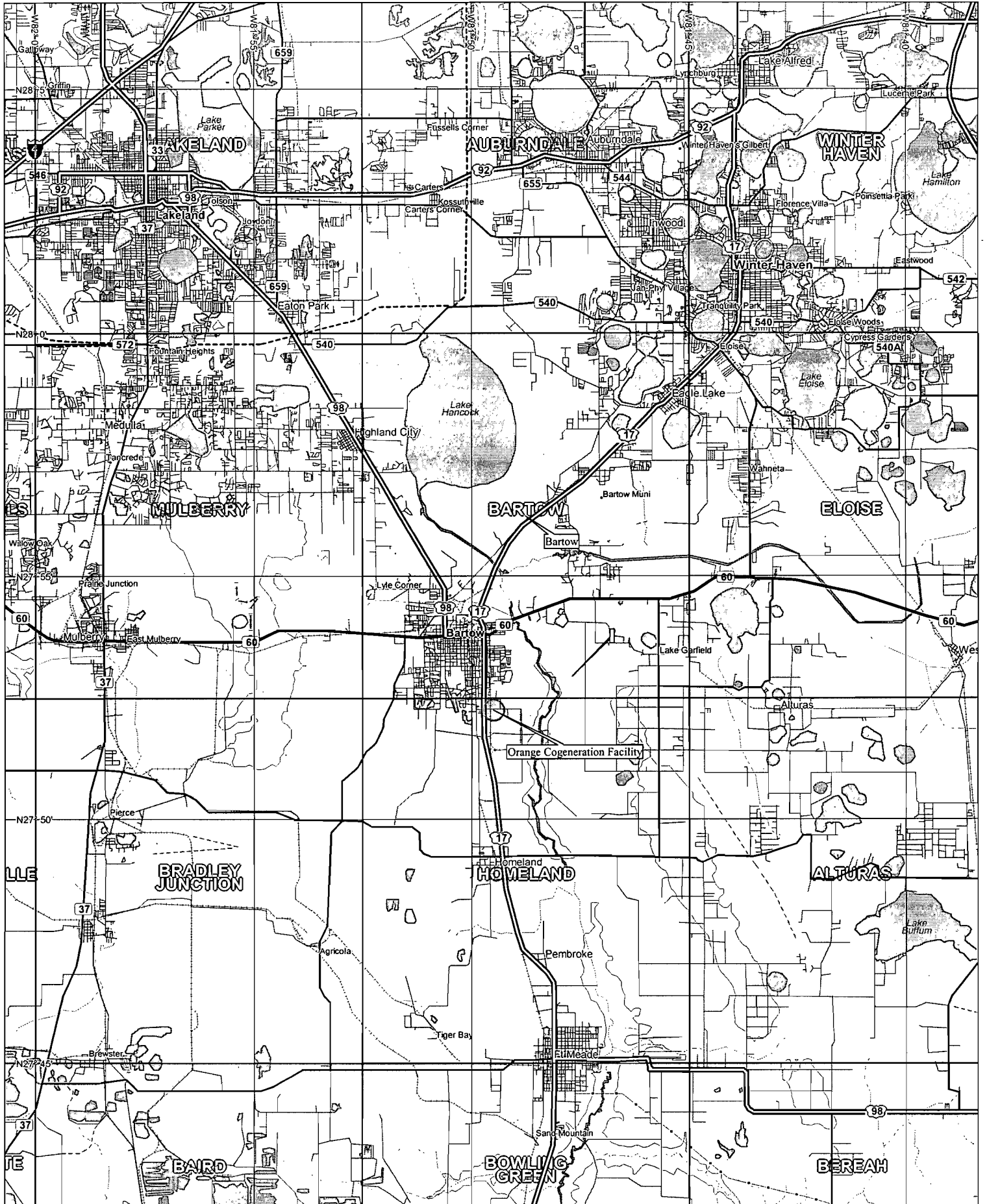
1. Area Map Showing Facility Location: <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-FI-001</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Facility Plot Plan: <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-FI-002</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Process Flow Diagram(s): <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-FI-003</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-FI-004</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
6. Supplemental Information for Construction Permit Application: <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-FI-006</u> <input type="checkbox"/> Not Applicable
7. Supplemental Requirements Comment: <p>Item 5, Fugitive Emissions Identification. Fugitive emissions are addressed as part of Emissions Unit 004.</p> <p>Item 6, Supplemental Information for Construction Permit Application. Document OC-FI-006 addresses the applicant's request for a minor modification to the construction permit, BACT Determination and the test methods and procedures. These changes will not result in any increase in potential emissions.</p>

Additional Supplemental Requirements for Title V Air Operation Permit Applications

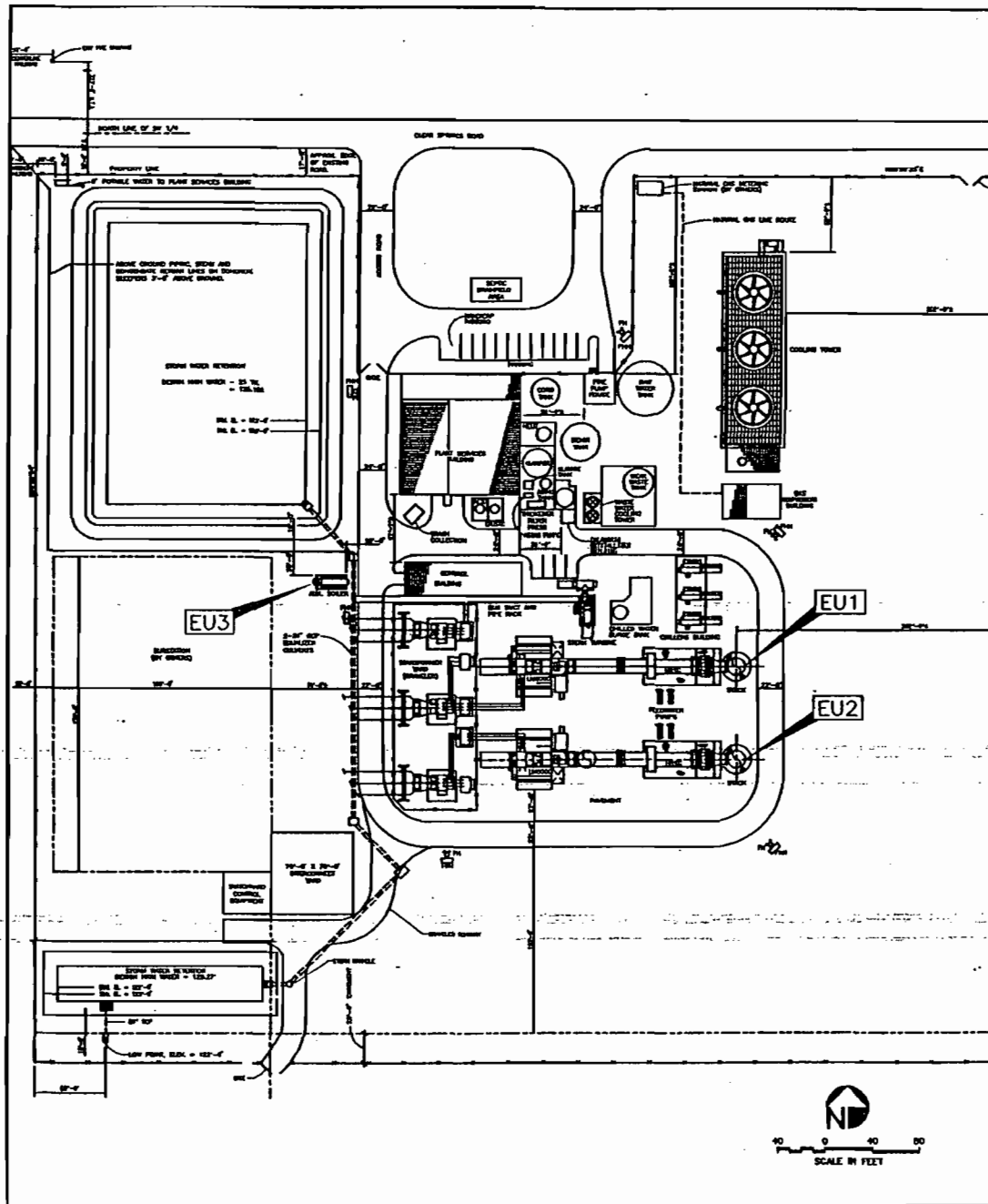
8. List of Proposed Insignificant Activities: <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-FI-008</u> <input type="checkbox"/> Not Applicable
9. List of Equipment/Activities Regulated under Title VI: <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-FI-009</u> <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input type="checkbox"/> Not Applicable
10. Alternative Methods of Operation: <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-FI-010</u> <input type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements: <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-FI-012</u> <input type="checkbox"/> Not Applicable
13. Risk Management Plan Verification: <input checked="" type="checkbox"/> Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID: <u>OC-FI-013</u>) or previously submitted to DEP (Date and DEP Office: _____) <input type="checkbox"/> Plan to be submitted to CEPPO (Date required: _____) <input type="checkbox"/> Not Applicable
14. Compliance Report and Plan: <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-FI-014</u> <input type="checkbox"/> Not Applicable
15. Compliance Certification (Hard-copy Required): <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-FI-015</u> <input type="checkbox"/> Not Applicable

**Section I.E. Facility Supplemental
Information**

Document ID OC-FI-001
Area Map



Document ID OC-FI-002
Facility Plot Plan



**Orange Cogeneration G.P.
Orange Cogeneration Facility**

TITLE V OPERATING PERMIT RENEWAL



Foster Wheeler Environmental Corporation

Scale: As Shown
Date: 5/20/02

Prepared: DJG
Approved: *[Signature]*

File: OC-FI-002.doc
Document ID: OC-FI-002

Source: 1996 Title V Permit Application, Attachment OR-FE-2

Document ID OC-FI-003
Process Flow Diagram

Document ID OC-FI-004
Reasonable Precautions

OC-FI-004

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

Unconfined particulate matter emissions associated with the operation and maintenance of the Orange Cogeneration Facility include the following sources and activities:

- ◆ Cooling Tower Drift Losses;
- ◆ Abrasive Blast Activities;
- ◆ Surface Coating Activities (Spray Painting);
- ◆ Dry Chemical Handling & Storage;
- ◆ Lawn & Ground Maintenance;
- ◆ Parking Areas; and
- ◆ Paved & Unpaved Roads.

Reasonable precautions to prevent and/or control unconfined particulate matter emissions include the following:

- ◆ Cooling Tower Drift Losses – Maintain proper water chemistry (pH & TDS) and equipment in accordance with the manufacturer's design specifications.
- ◆ Abrasive Blast Activities – When practical, use of partial or total enclosures and use of grit materials versus sand. Limit annual activities
- ◆ Surface Coating Activities – When practical, use of partial or total enclosures and limiting outdoor activities to times of favorable weather conditions to avoid off site impacts.
- ◆ Dry Chemical Handling & Storage – Clean-up spills immediately, good-house keeping practices.
- ◆ Lawn & Ground Maintenance – Application of water to non-vegetative areas as needed, landscaping and grass in other areas as necessary.
- ◆ Parking Areas – Application of water as needed.
- ◆ Paved and Unpaved Roads – As needed, application of water, the removal of particulate matter from paved roads, limited site access to vehicles, and vehicle speed limitations.

Document ID OC-FI-006
Supplemental Information

SUPPLEMENTAL INFORMATION FOR CONSTRUCTION PERMIT APPLICATION

As part of the Title V Permit renewal, the following minor modifications are requested to the BACT Determination and the construction permits:

Maximum Heat Input Rate

It is requested that the referenced maximum heat input rate be increased from 368.3 mmBtu/hr to 377.0 mmBtu/hr (<3% increase). The increase is requested to reflect the operating experience with the units versus the design data and to account for the lower heat content of the natural gas supplied to the facility (Design 946 Btu/scf versus actual 928 Btu/SCF). Specific Condition 8 (Permits PSD-FL-206B & 206C and AC53-233851B) limits the maximum heat input rates to 368.3 mmBtu/hr and references an approximate natural gas flow rate of 389,300 cubic feet per hour. It is requested that the condition be revised as follows:

Specific Condition 8. The maximum heat input rates, based on the lower heating value (LHV) of each fuel to each CT shall not exceed 377.0 mmBtu/hr at ISO Conditions. The maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufactures curves or equations along with fuel consumption and quality data, corrected to site conditions shall be used to demonstrate compliance with the limitation when requested by the Department.

The requested revision incorporates language consistent with other, more recent, FDEP permits for combustion turbine projects and will be consistent with testing requirements of Specific Condition 15.

Visible Emissions, PM, PM₁₀ and VOC Emission Limitations

It is requested that the BACT Determination on PM/PM₁₀ and VOC be revised to reflect Good Combustion Practices and Clean Fuels versus the current emission limitations in Table 1 of the PSD Permit. This is consistent with other more recent BACT Determinations.

The requested revision will include the deletion of Specific Condition 12 and a revision to Table 1 noting the VOC and PM/PM₁₀ emission rates are for informational purposes only. The Department will retain the authority to request testing if it suspects that actual emission rates are exceeding the referenced values.

It is also requested that the visible emissions limitation be removed from the BACT Determination and the PSD Permit (Specific Condition 13). Upon removal the General 20% opacity standard of Rule 62-296.320, F.A.C. would apply. The basis of the request seeks relief from conducting an annual EPA Method 9 on a natural gas fired combustion turbine.

Compliance assurance with the emission rates can be demonstrated through the use of the NO_x CEMS and the CO Process Monitor.

NO_x Continuous Emissions Monitoring System (CEMS)

It is requested that the PSD permit (Specific Condition 18) be revised to specify compliance with the Acid Rain Monitoring requirements of 40 CFR Part 75 for the NO_x and oxygen monitors. It is also requested that the NO_x CEMS be specified as the reference method for NO_x and that the annual testing (EPA Method 20) requirement (Specific Condition 16) be removed. This is consistent with current FDEP Guidance.

Document ID OC-FI-008
Insignificant Activities

OC-FI-008

List of Proposed Insignificant Activities

EU ID No.	Description	Category	Regulatory Status	Compliance Status
	Internal Combustion Engines - Vehicles ✓	A	I - (3)(a)	In
	Laboratory Vacuum Pumps ✓✓	P	I - (3)(a)	In
	Steam Cleaning Equipment ✓✓	F	I - (3)(a)	In
	Belt & Drum Sanders ✓✓	F	I - (3)(a)	In
	Laboratory Equipment ✓✓	F	I - (3)(a)	In
	Brazing, Soldering or Welding Equipment ✓	F	I - (3)(a)	In
	Emergency Generators ✓	P	I - (3)(a)	In
	Heating Units, General Purpose IC Engines and Other Combustion Sources ✓	F	I - (3)(a)	In
	Surface Coating Operations ✓	F	I - (3)(a)	In
	Degreasing Units (non-HAP Solvents) ✓	F	I - (3)(a)	In
	Petroleum Lubrication Systems ✓	F	I - (3)(a)	In
	Fungicide, Herbicide, & Pesticide Applications ✓✓	F	I - (3)(a)	In
	Asbestos Renovation & Demolition Activities ✓✓	F	I - (3)(a)	In
	Non-Halogenated Solvent Storage & Cleaning ✓	F	I - (3)(a)	In
	Abrasive Blasting Activities ✓	F	I - (3)(b)	In
	Non-Halogenated Solvent Storage & Cleaning ✓✓	F	I - (3)(b)	In
	Soda Ash Storage Hopper ✓	P	I - (3)(b)	In
	Primary Cooling Tower ✓✓	F	UR	In
	Secondary Cooling Tower ✓	F	UR	In
	Evaporator Tower ✓	P	UR	In
	Natural Gas Piping System ✓	F	I - (3)(b)	In
	Water Treatment, Storage, and Handling ✓	F	I - (3)(b)	In
	Lawn & Ground Maintenance ✓	F	UR	In
	Paved & Unpaved Roads ✓	F	UR	In

Notes: Category: P - Point, F - Fugitive, & A - Area
 Regulatory Status: I - Insignificant (Rule 62-210.(300(3)(a) or (b)) or UR - Unregulated
 Compliance Status: In or Out

Document ID OC-FI-009
List of Equipment/Activities – Title VI

OC-FI-009

LIST OF EQUIPMENT/ACTIVITIES – TITLE VI

The Orange Cogeneration Facility has 14 refrigeration and air condition units on the plant grounds. Of these, 3 air cooling units meet the 50-pound threshold established by the Department. These units include the following:

- ◆ Three (3) Chiller Units charged with 2200 pounds of R-123.

Document ID OC-FI-010
Alternative Methods of Operation

OC-FI-010

ALTERNATIVE METHODS OF OPERATION

The alternative methods of operation include the following:

- ◆ Natural Gas Firing in the combustion turbines and auxiliary boiler.
- ◆ Biogas Firing in the combustion turbines and auxiliary boiler.

The alternative methods of operation have all been addressed within the construction permits and the initial Title V Operating Permit.

Document ID OC-FI-012
Additional Applicable Requirements

420.01.01

AUG 27 1997

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



Lawton Chiles
Governor

Department of
Environmental Protection

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

Virginia B. Wehner
Secretary

August 25, 1997

In the Matter of an
Application for Permit Modification by

Mr. Allan Wade Smith, General Manager
Orange Cogeneration L.P., Inc.
1125 US Highway 98 South, Suite 100
Lakeland, Florida 33801

DEP File No. 1050231-002-AC
PSD-FL-206B
Polk County

Enclosed is Permit Modification Number 1050231-002-AC (PSD-FL-206B) extending the date of compliance with the nitrogen oxide emission limit at Orange Cogeneration's combined cycle unit located in Bartow, Polk County. 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.
for 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 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 8-25-97 to the person(s) listed:

Mr. Allan Wade Smith, Orange Cogen L.P. *
Mr. Brian Beals, EPA
Mr. John Bunyak, NPS
Mr. Bill Thomas, SWD
Mr. Roy Harwood, Polk County

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Kiri Jaber 8-25-97
(Clerk) (Date)

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Allan Wade Smith
General Manager
Orange Cogeneration L.P., Inc.
1125 US Highway 98 South, Suite 100
Lakeland, Florida 33801

Re: Permit Modification No. 1050231-002-AC, PSD-FL-206B
Bartow Facility, Extension of NO_x Compliance Date

Dear Mr. Smith:

The Department has reviewed the modification requested in your letter dated June 6, 1997. The referenced permit is hereby modified as follows:

SPECIFIC CONDITION 10

Prior to January 1, 1998 1999, the maximum NO_x concentration, 1-hour average, from each CT/HRSG unit, shall not exceed 25 parts per million by volume dry corrected to 15 percent oxygen (25 ppmvd @ 15% O₂), as determined by the procedures in Specific Conditions Nos. 16, 17 and 18.

SPECIFIC CONDITION 11

After December 31, 1997 1998, the maximum NO_x concentration, 1-hour average, from each CT/HRSG unit, shall not exceed 15 ppmvd @ 15% O₂, as determined by the procedures in Specific Conditions Nos. 16, 17 and 18. ~~Should the NO_x standard of 15 ppmvd @ 15% O₂ not be achieved during the initial compliance tests, the permittee will provide the Department with a plan and schedule to meet this standard. The permittee shall obtain prior approval from the Department for any air pollution control equipment not addressed in this permit that is needed to meet the NO_x emission standard.~~

SPECIFIC CONDITION 15

Manufacturer's curves for the emission rate correction to other temperatures at different loads shall be provided to DEP for review by January 1, 1998 1999. Until new curves are approved by the Department or the combustion turbines meet the NO_x emission standard of 15 ppmvd @ 15% (whichever occurs first), the stack, operator, and emission data for the proposed combustion turbines in Table 2-4 (October 28, 1993) will be used. The data will be used to determine compliance with the maximum allowable emission rates of the regulated air pollutants at different air inlet temperatures for these turbines.

DEC. 30. 1998 3:38PM POLK POWER

NO. 286 P. 2/5

Mr. Allan Wade Smith
Page 2 of 2
August 25, 1997

SPECIFIC CONDITION 16

Testing of emissions shall be conducted at 95-100% of the manufacturer's rated heat input based on the average air inlet temperature for the CT during the test. Compliance for NO_x emission limits shall be determined by calculating the concentration of NO_x (ppmvd at 15% O₂) and using the turbine manufacturer's thermal throughput rating for the average air inlet temperature by multiplying the permitted emission limit by the ratio of the tested heat input to the maximum heat input (MMBtu/hr) at this temperature. Compliance with the visible emissions, NO₂, SO₂, CO, PM/PM₁₀, and VOC emission standards shall be determined annually thereafter. Tests shall be conducted on both natural gas and biogas fuels, provided biogas gas fuels become available. If the initial tests or fuel analyses show the emissions of air pollutants from the combustion turbines are independent of the fuel (natural gas or biogas fuel), then annual compliance tests can be conducted while the combustion turbines are burning either fuel.

SPECIFIC CONDITION 19


Prior to January 1, 1998, the permittee shall provide a report showing how the allowable NO_x emissions of 15 ppmvd @ 15% O₂ is achieved by the CT's. The permittee shall provide quarterly reports regarding the progress toward attaining the allowable NO_x emissions of 15 ppmvd @ 15% O₂ until such emission level is attained.

TABLE 1

The compliance date is hereby changed to 1/1/99 as is the date in Note (d).

A copy of this letter shall be filed with the referenced permit and shall become part of the permit.

Sincerely,


Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/mc

F:\hsra\costello/orange/oromodtr.doc

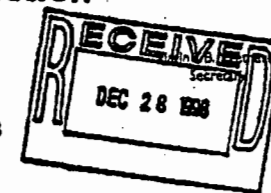


Lawton Chiles
Governor

Department of Environmental Protection

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

December 18, 1998



CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Allan Wade Smith, General Manager
Orange Cogeneration LP, Inc.
1125 US Highway 98 South, Suite 100
Lakeland, Florida 33801

Re: DEP File No. 1050231-003-AC (PSD-FL-206C)
Combined Cycle Cogeneration Plant
Dry Low NO_x Technology Compliance Date Extension

The Department has reviewed the modification requested in your letter dated September 25, 1998 to extend the date of compliance with the nitrogen oxide emission limit at Orange Cogeneration's combined cycle unit located in Bartow, Polk County. The referenced permit is hereby modified as follows:

SPECIFIC CONDITION 10

Prior to January 1, ~~1999~~ 2000, the maximum NO_x concentration, 1-hour average, from each CT/HSRG unit, shall not exceed 25 parts per million by volume dry corrected to 15 percent oxygen (25 ppmvd @ 15% O₂), as determined by the procedures in Specific Conditions Nos. 16, 17 and 18.

SPECIFIC CONDITION 11

After December 31, ~~1998~~ 1999, the maximum NO_x concentration, 1-hour average, from each CT/HSRG unit, shall not exceed 15 ppmvd @ 15% O₂, as determined by the procedures in Specific Conditions Nos. 16, 17 and 18. The permittee shall obtain prior approval from the Department for any air pollution control equipment not addressed in this permit that is needed to meet the NO_x emission standard. The Department may revise the limit based on the capabilities of alternative equipment installed.

SPECIFIC CONDITION 15

Manufacturer's curves for the emission rate correction to other temperatures at different loads shall be provided to DEP for review by January 1, ~~1999~~ 2000. Until new curves are approved by the Department or the combustion turbines meet the NO_x emission standard of 15 ppmvd @ 15% (whichever occurs first), the stack, operator, and emission data for the proposed combustion turbines in Table 2-4 (October 28, 1993) will be used. The data will be used to determine compliance with the maximum allowable emission rates of the regulated air pollutants at different air inlet temperatures for these turbines.

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Printed on recycled paper.


Orange Cogeneration LP, Inc.
DEP File No. 1050231-003-AC (PSD-FL-206C)
Page 2 of 2

TABLE 1

The compliance date is hereby changed to 1/1/00 as is the date in Note (d).

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes. Any party to this order (permit modification) has the right to seek judicial review of it under Section 120.68, F.S., by the filing of a Notice of Appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, 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 (thirty) days after this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.


Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL 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 12-22-98 to the person(s) listed:

- Allan Wade Smith, Orange Cogen LP *
- Gregg Worley, EPA
- John Bunyak, NPS
- Bill Thomas, DEP SWD
- Joe King, Polk County

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.

 12-22-98
(Clerk) (Date)

FINAL DETERMINATION

DEP File No. 1050231-003-AC (PSD-FL-206C)

Orange Cogeneration L.P., Inc.
Bartow, Polk County

An Intent to Issue an air construction permit modification for the Orange Cogeneration L.P., Inc. combined cycle cogeneration plant located at 1901 Clear Springs Mine Road, Bartow, Polk County, Florida was distributed on November 5, 1998.

The application was for an extension until January 1, 2000 to reduce nitrogen oxides emissions from 25 to 15 parts per million by volume (dry @15% O₂) using Dry Low NO_x technology (DLN). This will allow General Electric additional time to incorporate design changes based on recent testing conducted in Ohio and Florida. A similar developmental program by General Electric resulted in emissions well below 15 ppm by DLN from its larger 7EA gas combustion turbines at Cane Island, Mulberry and Gainesville.

The Public Notice of Intent to Issue Air Construction Permit Modification was published in The Polk County Democrat on November 9, 1998. Comments were received only from the U.S. Fish and Wildlife Service, Air Quality Branch. The main comment is as follows:

"Although FDEP does not have the authority to revisit BACT in this case, it is (the Park Service's) understanding that any revision and/or extension of a PSD permit must consider possible changes in BACT subsequent to the issuance of the original permit. In this case, Orange should be required to perform a new BACT analysis, with particular attention to the feasibility of installing Selective Catalytic Reduction (SCR) on this CCT."

Over the next year, General Electric and Orange Cogeneration will develop a number of options to meet the lower emission limit by DLN. Department approval is already required for any air pollution control equipment needed to achieve the emission standards. The Department will revise the permit to indicate that emission limits may be adjusted to reflect the reduction achievable by the option implemented.

The final action of the Department is to issue the permit modification as noticed, but with language indicating that the limits may be revised in accordance with the final technology chosen.

DEC. 30. 1998 3:48PM POLK POWER
-12/09/98 09:12 3305 98 2822

NPS AIR RES DIV

NO. 286 P. 5/5
001/001

DEC-28-99 TUE 12:27 PM USW ENRGY MULBEEKI

FAX NO. 941 033 6034

420.01.01

FDEP

Fax: 850-922-6979

Dec 28 '99 11:23

P. 01/04



U.S. FISH & WILDLIFE SERVICE
AIR QUALITY BRANCH

P.O. BOX 75287, Denver, CO 80215-0287

FACSIMILE COVER SHEET

Date: December 8, 1998

Telephone: (303) 969-2617

Fax: (303) 969-2822

To: AJ Linero

Subject: Orange Cogen—Bartow—BACT Analysis

Best Available Control Technology Review

Orange Cogen (Orange) received a permit from FDEP for installation of a two new 41 MW Combined Cycle Turbines (CCT) with NO_x to be controlled to 15 ppm by Dry Low-NO_x (DLN) combustors. However, Orange has experienced difficulties in meeting that limit and has requested until 1/1/2000 to do so.

Although FDEP does not have the authority to revisit BACT in this case, it is my understanding that EPA policy demands that any revision and/or extension of a PSD-permit must consider possible changes in BACT subsequent to the issuance of the original permit. In this case, Orange should be required to perform a new BACT analysis, with particular attention to the feasibility of installing Selective Catalytic Reduction (SCR) on this CCT.

Number of Pages: 1
(Including this cover sheet)

Office Location: 7388 West Jefferson Ave, Suite 430, Lakewood, CO 80235

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:

Orange Cogeneration Limited Partnership
1125 U.S. 98 South
Suite 100
Lakeland, Florida 33801

DEP File No. 1050231-005-AC, PSD-FL-206C
Orange Cogeneration Facility
Polk County

Enclosed is Final Permit Number 1050231-005-AC. This permit authorizes Orange Cogeneration Limited Partnership to install wet technologies on the Orange Cogeneration Facility's Units 1 and 2 in an effort to reduce the NO_x emission rate to 15 ppmvd while firing natural gas or biogas. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of Criminal Counsel, Mail Station #J3, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, 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 must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

C. H. Fancy
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 Permit (including the Final permit) was sent by certified mail ("*) and copies were mailed by U.S. Mail before the close of business on 12-28-99 to the person(s) listed:

Wade Smith, Orange Cogeneration *
Gregg Worley, EPA
Doug Nozley, EPA
John Buznyak, NPS
Bill Pross, DEP-SWD

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.

Kimi John 12-28-99
(Clerk) (Date)

NATURE BUREAU FAX MEMO 01/15		DATE 12/28/99	FILE # 4
TO: Dennis Oehring	FROM: Kimi John		
CC: Orange	DEPT: DEP	DAEM	
FROM: C. H. Fancy	FILE #	921-9533	

FDEP Fax:850-922-6979 Dec 28 '99 11:23 P.02/04

FINAL DETERMINATION
Orange Cogeneration Limited Partnership
Orange Cogeneration Facility
DEP File No. 1050231-005-AC, PSD-FL-206C

The Department distributed a public notice package on November 23, 1999 to allow the applicant to modify its permit at the Orange Cogeneration Facility located in Polk County. The Public Notice of Intent to Issue was published in the Polk County Democrat on November 25, 1999.

COMMENTS/CHANGES

No comments were received by the Department from the public.
Neither the EPA nor the National Park Service had adverse comments.
No comments were received from the applicant.

CONCLUSION

The final action of the Department is to issue the permit without changes.

FDEP Fax:850-922-6979 Dec 28 '99 11:23 P.03/04



Job Bush
Governor

Department of
Environmental Protection

Twin Towers Office Building
2500 Blair Street Road
Tallahassee, Florida 32399-2400

David R. Soren
Secretary

December 23, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Wade Smith
General Manager
Orange Cogeneration Limited Partnership
1123 US Highway 98 South
Suite 100
Lakeland, Florida 33801

Re: DEP File No. 1050231-005-AC; Modification of Permit No. PSD-FL-206C
Orange Cogeneration / Polk County

The applicant, Orange Cogeneration Limited Partnership (OCLP), applied on October 23, 1999, to the Department for a modification to air construction permit number PSD-FL-206C for its Orange Cogeneration Facility located in Polk County. The request is to allow the facility to install NO_x control equipment on Emulsion Units 001 and 002, GE LM 6000 DLE units configured for combined cycle operation. The specific equipment requested will allow SFERNT™ and selective water injection to be installed in addition to the Dry Low Emissions equipment. The Department has reviewed the modification request. The referenced permit is hereby modified as follows:

- Specific Condition 8 and Table 1 (note c): Each CT shall have a maximum heat input (LHV) of 348.3 MMBtu/hr, which is approximately 239,300 CFH of natural gas, when using dry low NO_x boiler water injection technology to control NO_x emissions.
- Specific Condition 10: Prior to September 1, 2000, the maximum NO_x concentration, 1 hour average, from each CT/HRSG unit shall not exceed 25 parts per million by volume dry corrected to 15 percent oxygen at ISO standard ambient conditions (ppmv @ 15% O₂ at ISO conditions), as determined by the procedures in Specific Conditions No. 16, 17 and 18.
- Specific Condition 11 and Table 1 (note d): After December 31, 1999 August 31, 2001, the maximum NO_x concentration, 1-24-hour block average, from each CT/HRSG unit shall not exceed 15 ppmvd @ 15% O₂ at ISO conditions as determined by the procedure in Specific Conditions Nos. 16, 17 and 18. No further extensions of this permit shall be granted for the purpose of achieving the corrected 15 ppmvd NO_x emissions with the exception of a reasonable time required to install SCR. The permittee shall obtain prior approval from the Department for any air pollution control equipment not addressed in this permit that is needed to meet the NO_x emission standard. The Department may revise the limit based upon the capabilities of alternative equipment installed.
- Specific Condition 19: Prior to January 1, 2000 September 1, 2000, the permittee shall provide a report showing how the allowable NO_x emissions of 15 ppmvd @ 15% O₂ ISO conditions is achieved by the CTs.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes.

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper

DEC-26-95 TUE 12:28 PM CSW ENERGY MULBERRY

FAX NO. 941 533 4092

P. 4

FILED

FAX: 850-972-6070

DEC 28 11 28

P. 04/04

Orange Cogeneration LP
Polk County

DEP File No. 1050231-005-AC

Any party to this order (permit modification) has the right to seek judicial review of it under Section 120.55, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station 613, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-1000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notes must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Howard L. Rhodes
for Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this permit modification was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 12-28-99 to the person(s) listed:

- Wade Smith, Orange Cogeneration LP
- Doug Neely, EPA
- John Buryak, NPS
- Bill Proser, DEP-SWD
- Mr. 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.

David John 12-28-99
(Clerk) (Date)

BEST AVAILABLE COPY

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF REVISED PERMITS

In the matter of an Application for Revised Permits by: DEP File Nos. AC 53-233852A
AC 53-233851B
PSD-FL-206A&B
Polk County

Mr. William R. Malenius
Director of Project Development
Orange Cogeneration Limited Partnership
23046 Avenida De La Carlota
Laguna Hills, CA 92653

Enclosed are revised permits, Nos. AC 53-233852A & AC 53-233851B and PSD-FL-206B, and the revised Best Available Control Technology (BACT) determination for two gas combustion turbines and one auxiliary boiler to be located in Bartow, Polk County, Florida. These revised permits and BACT determination change the nitrogen oxides emission standard concentration from 15 parts per million by volume dry corrected to 15 percent oxygen and ISO ambient standard conditions (15 ppmvd @ 15% O₂ @ ISO) to the observed concentration of 15 ppmvd @ 15% O₂. These revised permits and BACT determination are issued pursuant to Section 403, Florida Statutes.

Any party to this Order (revised permits) has the right to seek judicial review of the revised permits pursuant to Section 120.58, 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

[Signature]
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 REVISED PERMITS and all copies were mailed by certified mail before the close of business on 3-7-95 to the listed persons.

Clerk Stamp

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

[Signature] 3-7-95
Clerk Date

Copies furnished to:

- B. Thomas, SWD
- J. Harper, EPA
- J. Bunyak, NPS
- L. Novak, PCESD
- K. Kosky, P.E., KBN
- T. Donovan, OCLP

FINAL DETERMINATION

Orange Cogeneration L.P.

AC 53-233852A & AC 53-233851B
PSD-FL-206B

An Intent to Issue Revised Permits for Orange Cogeneration Limited Partnership proposed combustion turbines and auxiliary boiler to be located in Bartow, Polk County, Florida, was distributed on December 29, 1994. The Notice of Intent to Issue Revised Permits was published in the Polk County Democrat on January 5, 1995.

Orange Cogeneration Limited Partnership submitted a comment in a letter dated January 26, 1995. It was noted that the nitrogen oxides emission standard in Specific Condition No. 19 had the ISO condition listed and not been revised, which was the purpose of the request. The Department agrees with this comment and has corrected the condition.

The final action of the Department will be to issue the revised permits and BACT as proposed in the Intent to Issue Revised Permits, except for the change noted above.



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherall
Secretary

PERMITTEE:
Orange Cogeneration Limited
Partnership
23046 Avenida De La Carlota
Suite 400
Laguna Hills, CA 92653

Permit Number: AC53-233851B
PSD-FL-206B
Expiration Date: April 1, 1998
County: Polk
Latitude/Longitude: 27°52'15"N
81°49'31"W
Project: Two Combustion Turbines

This revised permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, 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 drawings, plans, and other documents attached hereto and specifically described as follows:

Installation of two natural gas/biogas fired GE LM 6000 (or equivalent) combustion turbines (CT), two heat recovery steam generators and one steam turbine. An auxiliary boiler (AC53-233852) is being permitted separately. The CTs will be equipped with a staged combustion technology dry low-NO_x system to control nitrogen oxides (NO_x) emissions. Each CT will be equipped with a 100 ft. high, 11 ft. diameter stack that will handle approximately 300,000 actual cubic feet per minute of flue gas at 230°F. The cogeneration facility will be located on Clear Springs Road, Bartow, Polk County, Florida.

The UTM coordinates of this facility are Zone 17, 418.75 km East and 3083.0 km North.

The emissions unit(s)/sources shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Application received July 1, 1993.
2. Department's July 22, 1993 letter.
3. KBN's August 5, 1993 letter.
4. KBN's August 29, 1993 letter.
5. Tables 1 and 2, Allowable Emission Rates.
6. KBN's October 28, 1993 letter.
7. KBN's October 29, 1993 letter.
8. Department's February 18, 1994 letter.
9. KBN's March 11, 1994 letter.
10. Department's March 29, 1994 letter.
11. KBN's June 22, 1994 letter.
12. KBN's October 10, 1994 letter.

PERMITTEE:
Orange Cogeneration Limited
Partnership

Permit Number: AC53-233851B
(PSD-FL-206B)
Expiration Date: April 1, 1998

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 acknowledgement 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.

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PERMITTEE:
Orange Cogeneration Limited
Partnership

Permit Number: AC53-233851B
(PSD-FL-206B)
Expiration Date: April 1, 1998

GENERAL CONDITIONS:

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 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.

PERMITTEE:
Orange Cogeneration Limited
Partnership

Permit Number: AC53-233851B
(PSD-FL-206B)
Expiration Date: April 1, 1998

GENERAL CONDITIONS:

11. This permit is transferable only upon Department approval in accordance with 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.

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)
- (x) 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 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.

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PERMITTEE:
Orange Cogeneration Limited
Partnership

Permit Number: AC53-233851B
(PSD-FL-206B)
Expiration Date: April 1, 1998

ORANGE COGENERATION LIMITED PARTNERSHIP
AC53-233851B (PSD-FL-206B)
42 MW COMBINED CYCLE GAS TURBINES

GENERAL CONDITIONS:

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.

SPECIFIC CONDITIONS:

This permit replaces permit No. AC53-233851/PSD-FL-206 and amended construction permit No. AC53-233851A/PSD-FL-206A.

Construction Requirements

1. Dry low-NO_x combustion technology systems shall be installed and operated on each combustion turbine (CT).
2. A system to continuously monitor the fuel consumption, nitrogen oxides emissions, and oxygen content of the flue gas shall be installed on each CT.
3. The heat recovery steam generator (HRSG) installed on each CT shall not be equipped with an auxiliary/duct burner.
4. Each CT stack shall be equipped with stack sampling facilities (sample ports, work platforms, access, and electrical power) that meet the specifications given in Rule 62-297.345, F.A.C.

Operation Limitations

5. The CTs shall comply with all requirements of 40 CFR 60, Subpart GG (July, 1993), Standard of Performance for Stationary Gas Turbines, which is adopted by reference in Rule 62-296.800(2)(a), F.A.C.
6. The facility is allowed to operate continuously, 8760 hours per year.
7. Only natural gas/biogas fuel shall be used for fuel at this facility.
8. Each CT shall have a maximum heat input of 368.3 MMBtu/hr, when using dry low NO_x technology to control NO_x emissions.
9. The operation of this facility shall not create a nuisance or discharge air pollutants that cause or contribute to objectionable odors pursuant to Rule 62-296.320(2), F.A.C.

Table 1 - Allowable Emission Rates^b for each Combustion Turbine

Pollutant ^a	Control ^e	Concentration	Allowable Emissions Standards/Limitations			
			Compl. Date	Maximum Corrected ^c lbs/hr	TPY	Basis for Limit
NO _x	DLN	25 ppwvd at 15% O ₂ ^d	initial	37.0	161.9	BACT
	DLN	15 ppwvd at 15% O ₂ ^d	1/1/98	22.1	97.0	BACT
CO	GC ^f	30 ppwvd		27.8	127.0	BACT
PM/PM ₁₀	GC ^f			5	21.9	BACT
VOC	GC ^f	10 ppwvd		3.98	17.4	BACT

- ^a Pollutant emissions are based on 8,760 hours per year operation firing natural gas or biogas.
- ^b Allowable emissions, lbs/hr, at different inlet temperatures shall not exceed the rates given in the manufacturer's data required by specific condition No. 15.
- ^c Maximum emission rates not to be exceeded.
- ^d The NO_x maximum concentration will be lowered to 15 ppwvd at 15% O₂ by 1/1/98 using appropriate combustion technology improvements. Should this level of control not be achieved when the initial compliance demonstration stack tests are performed, the permittee must provide the Department with a plan and schedule to meet this standard. NO_x emission concentrations are to be corrected to 15 percent oxygen to demonstrate compliance with the NO_x emissions standard.
- ^e Dry Low-NO_x (DLN) combustors.
- ^f Good Combustion.

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PERMITTEE:
Orange Cogeneration Limited
Partnership

Permit Number: AC53-233851B
(PSD-FL-206B)
Expiration Date: April 1, 1998

SPECIFIC CONDITIONS:

Emission Limitation

10. Prior to January 1, 1998, the maximum NO_x concentration, 1-hour average, from each CT/HRSG unit, shall not exceed 25 parts per million by volume dry corrected to 15 percent oxygen (25 ppmvd @ 15% O₂), as determined by the procedures in Specific Conditions Nos. 16, 17 and 18.

11. After December 31, 1997, the maximum NO_x concentration, 1-hour average, from each CT/HRSG unit, shall not exceed 15 ppmvd @ 15% O₂, as determined by the procedures in Specific Conditions Nos. 16, 17 and 18. Should the NO_x standard of 15 ppmvd @ 15% O₂ not be achieved during the initial compliance tests, the permittee will provide the Department with a plan and schedule to meet this standard. The permittee shall obtain prior approval from the Department for any air pollution control equipment not addressed in this permit that is needed to meet the NO_x emission standard.

12. The maximum emission rates for particulate matter (PM/PM₁₀), volatile organic compounds (VOC), NO_x, and carbon monoxide (CO) shall not exceed any of the rates listed in Table 1, Allowable Emission Rates.

13. Visible emissions shall not exceed 10 percent opacity, 6 minute average.

14. The emission rates for sulfur dioxide (SO₂) and sulfuric acid (H₂SO₄) mist, listed in the following table, shall be used for inventory purposes only.

Maximum Emission Rates for Each Combustion Turbine
For Inventory and PSD Tracking Purposes Only

Pollutant	Combustion Turbine	
	Dry Low NO _x Combustion lb/hr	TFY
SO ₂	1.11	4.87
H ₂ SO ₄ mist	0.085	0.37

15. Manufacturer's curves for the emission rate correction to other temperatures at different loads shall be provided to DEP for review by January 1, 1998. Until new curves are approved by the Department or the combustion turbines meet the NO_x emission standard of 15 ppmvd @ 15% (whichever occurs first), the stack, operator, and emission data for the proposed combustion turbines in

PERMITTEE:
Orange Cogeneration Limited
Partnership

Permit Number: AC53-233851B
(PSD-FL-206B)
Expiration Date: April 1, 1998

SPECIFIC CONDITIONS:

Table 2-4 (October 28, 1993) will be used. The data will be used to determine compliance with the maximum allowable emission rates of the regulated air pollutants at different air inlet temperatures for these turbines.

Compliance Determination

16. Testing of emissions shall be conducted at 95-100% of the manufacturer's rated heat input based on the average air inlet temperature for the CT during the test. Compliance for NO_x emission limits shall be determined by calculating the concentration of NO_x (ppmvd at 15% O₂) and using the turbine manufacturer's thermal throughput rating for the average air inlet temperature by multiplying the permitted emission limit by the ratio of the tested heat input to the maximum heat input (MMBtu/hr) at this temperature. Compliance with the visible emissions, NO_x, SO₂, CO, PM/PM₁₀, and VOC emission standards shall be determined within 60 days of achieving maximum production but not later than 180 days after initial firing of each CT (40 CFR 60.8). Compliance with the visible emissions limitation and the NO_x and SO₂ emission standards shall be determined annually thereafter. Tests shall be conducted on both natural gas and biogas fuels. If the initial tests or fuel analyses show the emissions of air pollutants from the combustion turbines are independent of the fuel (natural gas or biogas fuel), then annual compliance tests can be conducted while the combustion turbines are burning either fuel.

17. Compliance shall be determined by the following test methods listed in 40 CFR 60, Appendix A (July, 1993).

Pollutant	EPA Method
PM/PM ₁₀ *	5 or 17**
NO _x	20
CO	10
VOC	18 or 25A
Visible Emissions	9

NOTE: No other test methods may be used for compliance testing unless prior Department written approval has been received.

* Assumption is that all PM is PM₁₀.

** Stack flue gas temperature must be less than 320°F to use Method 17.

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PERMITTEE:
Orange Cogeneration Limited
Partnership

Permit Number: AC53-233851B
(PSD-FL-206B)
Expiration Date: April 1, 1998

SPECIFIC CONDITIONS:

Monitoring

18. NO_x and oxygen monitoring to meet the requirements of 40 CFR 60, Subpart GG, shall be accomplished using a continuous emission monitoring (CEM) system. The CEM system shall meet the requirements of 40 CFR 60, Appendix B. The requirements of 40 CFR 75, Appendices A and B, can be substituted for those of 40 CFR 60 provided the minimum criteria of 40 CFR 60 are met. NO_x monitoring to indicate compliance with the BACT limit shall be based on one hour average emissions determined on ppavd @ 15% O₂.

Administrative Requirement

19. Prior to January 1, 1998, the permittee shall provide a report showing how the allowable NO_x emissions of 15 ppavd @ 15% O₂ is achieved by the CTs.

20. The permittee shall provide the Southwest District office with the following notifications required by 40 CFR 60.7:

- When construction commenced within 30 days of commencement of construction
- Anticipated date of initial starting 30 to 60 days prior to startup
- Actual date of startup up within 15 days after the starting
- Notification of the date of the compliance tests not less than 30 days prior to the test

21. Pursuant to Rule 62-210.370(2), F.A.C., Air Operating Reports, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. These reports shall include, but are not limited to the following: sulfur content and the lower heating value of the fuel being fired, fuel usage, hours of operation, and air emissions. Annual reports shall be sent to the Department's Southwest District office by March 1 of each calendar year.

22. 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.).

23. An application for an operation permit must be submitted to the Department's Southwest District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the appropriate application form, fee, certification that construction was completed noting any deviations from the conditions in the

PERMITTEE:
Orange Cogeneration Limited
Partnership

Permit Number: AC53-233851B
(PSD-FL-206B)
Expiration Date: April 1, 1998

SPECIFIC CONDITIONS:

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

David Wetherell for
Virginia B. Wetherell, Secretary



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

PERMITTEE:

Orange Cogeneration Limited
Partnership
23046 Avenida De La Carlota
Suite 400
Laguna Hills, CA 92653

Permit Number: AC53-233852A
PSD-FL-206B
Expiration Date: April 1, 1996
Latitude/Longitude: 27°52'15"N
81°49'31"W
Project: Auxiliary Boiler
County: Polk

This revised permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-212 and 62-4, 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 drawings, plans, and other documents attached hereto and specifically described as follows:

Installation of a 100 million British thermal unit per hour (MMBtu/hr) natural gas/equivalent biogas fired tube boiler equipped with a 65 foot high, 3.67 foot diameter stack designed to produce approximately 83,000 pounds per hour of saturated steam at 205 pounds per square inch gauge (psig) pressure. The heat input is based on the High Heating Value (HHV) of the fuel. The auxiliary boiler will be located on Clear Springs Road, Bartow, Polk County, Florida 33830.

The UTM coordinates of this facility are Zone 17, 418.75 kmE and 3083.0 kmN.

The emission unit/source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Attachments are listed below:

1. Application received July 1, 1993.
2. Department's July 22, 1993 letter.
3. KBN's August 5, 1993 letter.

PERMITTEE:

Orange Cogeneration Limited
Partnership

Permit Number: AC53-233852A
Expiration Date: April 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 the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement 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.

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PERMITTEE:
Orange Cogeneration Limited
Partnership

Permit Number: AC53-233852A
Expiration Date: April 1, 1996

GENERAL CONDITIONS:

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 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.

PERMITTEE:
Orange Cogeneration Limited
Partnership

Permit Number: AC53-233852A
Expiration Date: April 1, 1996

GENERAL CONDITIONS:

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 62-730.300, 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.

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)
- (X) 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 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.

PERMITTEE:
Orange Cogeneration Limited
Partnership

Permit Number: AC53-233852A
Expiration Date: April 1, 1996

GENERAL CONDITIONS:

- 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.

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.

SPECIFIC CONDITIONS:

Construction Requirements

1. The auxiliary boiler shall be equipped with low-NO_x burners.
2. The boiler stack shall be equipped with stack sampling facilities (sample ports, work platforms, access, electrical power) that meet the specifications given in Rule 62-297.345, F.A.C.

Operation Limitations

3. The auxiliary boiler shall comply with all applicable requirements of 40 CFR 60, Subpart Dc.
4. The boiler is allowed to operate continuously, 8760 hours per year.
5. Only natural gas/equivalent biogas fuel shall be burned in this boiler.
6. The maximum heat input to the boiler, which is based on the high heating value (HHV) of the fuel, shall not exceed 100 MMBtu/hr.
7. The maximum allowable sulfur content (total) of the natural gas/biogas burned in the boiler shall not exceed 1 grain per 100 cubic feet (1 gr/100 CF) of gas.

PERMITTEE:
Orange Cogeneration Limited
Partnership

Permit Number: AC53-233852A
Expiration Date: April 1, 1996

SPECIFIC CONDITIONS:

8. The operation of this boiler shall not emit air pollutants that cause or contribute to objectionable odors.
9. Visible emissions shall not exceed 15 percent opacity.
10. Emissions from the boiler shall not exceed any of the following limits:

Pollutant	lb/MMBtu	lbs/hr	TPY
NO _x	0.13	13.0	56.9
CO	0.10	10.0	43.8
VOC	0.04	4.3	18.8

11. Sulfur dioxide (SO₂) emissions from the boiler shall not exceed 0.003 lb/MMBtu, 0.30 lb/hr, and 1.3 TPY. An analysis of the fuel showing the sulfur content does not exceed 1 grain of total sulfur per 100 cubic feet of gas will be accepted as proof of compliance with the sulfur dioxide emission limit. Total sulfur content of the gas shall be determined by test method ASTM D 1072-80 (40 CFR 60.17 (July, 1993)).

12. Particulate matter (PM/PM₁₀) emissions from the boiler shall not exceed 0.01 lb/MMBtu, 1.0 lb/hr, and 4.4 TPY. No PM/PM₁₀ stack test is required if the visible emissions limitation is less than 15 percent opacity.

Testing Requirements

13. Testing of emissions shall be conducted with the source operating at permitted capacity. Capacity is defined as 90-100% of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then sources may be tested at less than 90% of the maximum operating rate allowed by the permit. In this case, subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the Department. Compliance with the visible emissions limitation and the NO_x, CO, and VOC emission standards shall be determined within 60 days of achieving maximum production, but not later than 180 days after initial firing of the boiler. Compliance with the visible emissions limitation and the NO_x emission standards shall be determined annually thereafter.

PERMITTEE:
Orange Cogeneration Limited
Partnership

Permit Number: AC53-233852A
Expiration Date: April 1, 1996

SPECIFIC CONDITIONS:

14. Compliance shall be determined by the following test methods listed in 40 CFR 60, Appendix A (July, 1993).

Pollutant	EPA Method
PM/PM ₁₀ *	5 or 17**
NO _x	7E
CO	10
VOC	18 or 25A
Visible Emissions	9

NOTE: No other test methods may be used for compliance testing unless prior Department written approval has been received.

* Assumption is that all PM is PM₁₀.

** Stack flue gas temperature must be less than 320°F for Method 17.

15. The permittee shall provide the Department's Southwest District office with the following notifications required by 40 CFR 60.7:

- When construction commenced within 30 days of commencement of construction.
- Anticipated date of initial startup, 30 to 60 days prior to startup.
- Actual date of startup within 15 days after the startup.
- Notification of the date of the compliance tests not less than 30 days prior to the tests.

16. Pursuant to Rule 62-210.370(2), F.A.C., Air Operating Reports, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. These reports shall include, but are not limited to the following: sulfur content and the lower heating value of the fuel being fired, fuel usage, hours of operation, air emission limits, etc. Annual reports shall be sent to the Department's Southwest District office by March 1 of each calendar year.

17. 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.).

18. An application for an operation permit must be submitted to the Department's Southwest District office at least 90 days prior to the expiration date of this construction permit. To properly apply for an operation permit, the applicant shall submit the

PERMITTEE:
Orange Cogeneration Limited
Partnership

Permit Number: AC53-233852A
Expiration Date: April 1, 1996

SPECIFIC CONDITIONS:

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

Virginia B. Wetherell
Virginia B. Wetherell, Secretary

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**Revised Best Available Control Technology (BACT) Determination
Orange Cogeneration Limited Partnership
Polk County
AC53-233852A and AC53-233851B (PSD-FL-206B)**

The applicant proposes to construct a 103 gross megawatt (MW) natural gas/biogas fired cogeneration facility in Bartow, Polk County, Florida. Major components of the cogeneration facility are: two combustion turbines (CT), each with a heat recovery steam generator (HRSG), an auxiliary boiler, steam turbine generator, and associated equipment. Both CTs will consume up to 776 million British thermal units per hour (MMBtu/hr) of gas fuel based on the lower heating value (LHV) of the fuel and produce 78 MW of electricity. The HRSGs, which do not use supplemental fuel, produce approximately 100,000 lbs/hr of steam and generate 25 MW of electricity. The fire-tube auxiliary boiler will consume 100 MMBtu/hr of gaseous fuel and produce approximately 83,000 lbs/hr of steam.

The following table lists the estimated maximum emissions from the cogeneration facility.

Pollutant	Two CTs		Auxiliary Boiler	
	lbs/hr	TPY	lbs/hr	TPY
Sulfur dioxide (SO ₂)	2.34	10.3	0.3	1.3
Particulate Matter (PM/PM ₁₀)	10	43.8	1.0	4.4
Nitrogen Oxide (NO _x)	77.0	336.9	13.0	56.9
Carbon Monoxide (CO)	55.6	243.9	10.0	43.8
Volatile Organic Compounds (VOC)	7.96	34.9	4.3	18.8
Sulfuric Acid Mist	0.18	0.79	0.023	0.1

The cogeneration facility requires a BACT determination for NO_x, CO, PM, and VOC. In addition, the auxiliary boiler requires a BACT determination for PM and SO₂.

Date of Receipt of a BACT Application

July 1, 1993

BACT Requested by the Applicant

Pollutant Control	Proposed Limit	Air Pollution
Combustion Turbine		
PM	0.01 gr/scf*	Clean Fuel (gas) and
NO _x	25 ppmvd @ 15%**	Dry Low-NO _x Combustors
	15 ppmvd @ 15%**	

Orange Cogeneration (Revised BACT)
AC53-233852A and AC53-233851B (PSD-FL-206B)
Page 2

CO	30 ppmvd	Combustion Controls
VOC	10 ppmvd	Combustion Controls
Auxiliary Boiler		
PM	0.01 lbs/MMBtu	Clean Fuel (gas)
NO _x	0.13 lbs/MMBtu	Low-NO _x burners
SO ₂	1 grain/100 CF natural gas	Clean Fuel (natural gas)
CO	0.10 lbs/MMBtu	Combustion Control
VOC	0.043 lbs/MMBtu	Combustion Control

*grains per standard cubic foot
**parts per million by volume dry at 15 percent oxygen
Applicant is committed to meeting 15 ppmvd @ 15% O₂ with dry low-NO_x combustors after December 31, 1997.

BACT Determination Procedure

In accordance with Florida Administrative Code Chapter 62-212, this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department, on a case by case basis, taking into account energy, environmental and economic impacts, and other costs, determines is achievable through application of production processes and available methods, systems, and techniques. In addition, the regulations state that in making the BACT determination the Department shall give consideration to:

- Any Environmental Protection Agency determination of Best Available Control Technology pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources) or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants).
- All scientific, engineering, and technical material and other information available to the Department.
- The emission limiting standards or BACT determinations of any other state.
- The social and economic impact of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine for the emission source in question the most stringent control available for a similar or identical source or source category. If it is shown that this level of control is technically or economically infeasible for the source in question, then the next most stringent level of control is determined and similarly

evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic objections.

The air pollutant emissions from cogeneration facilities can be grouped into categories based upon what control equipment and techniques are available to control emissions from these facilities. Using this approach, the emissions can be classified as follows:

- o Combustion Products (e.g., particulates matter). Controlled generally by good combustion of clean fuels.
- o Products of Incomplete Combustion (e.g., CO). Control is largely achieved by proper combustion techniques.
- o Acid Gases (e.g., NO_x). Controlled generally by gaseous control devices.

Although all of the pollutants addressed in the BACT analysis may be subjected to a specific emission limiting standard as a result of PSD review, the control of "nonregulated" air pollutants is considered in imposing a more stringent BACT limit on a "regulated" pollutant (i.e., particulates, sulfur dioxide, sulfuric acid mist, etc.), if a reduction in "nonregulated" air pollutants can be directly attributed to the control device selected as BACT for the abatement of the "regulated" pollutants.

BACT Pollutant Analysis for the Combustion Turbines (CTs)

Nitrogen Oxides (NO_x)

The emissions of nitrogen oxides represent a significant proportion of the total emissions generated by this project, and need to be controlled if deemed appropriate. As such, the applicant presented an extensive analysis of the different available technologies for NO_x control. The control technologies evaluated were selective catalytic reduction (SCR), wet injection (WI), dry low-NO_x combustor, NO_xOUT process, thermal DeNO_x, and selective noncatalytic reduction (SNCR).

NO_xOUT (urea with catalyst), thermal DeNO_x (ammonia with catalyst), and selective noncatalytic reduction system (ammonia without catalyst) to reduce NO_x emissions from the CT were not feasible because of process constraints (flue gas temperature too low and oxygen content too high).

SCR, dry low-NO_x combustor technology, and wet injection controls were considered feasible.

The applicant has stated that BACT for nitrogen oxides will be met

by using advanced combustor design to limit emissions to 25 ppmvd @ 15% O₂, when burning natural gas/biogas. After December 31, 1997, a limit of 15 ppmvd @ 15% O₂ will be met. Should 15 ppmvd NO_x @ 15% O₂ not be achieved during the initial compliance tests, the permittee will provide the Department with a plan and schedule to meet this standard.

A review of the EPA's BACT/LAER Clearinghouse indicates that the lowest NO_x emission limit established to date for a combustion turbine is 4.5 ppmvd at 15% oxygen. This level of control was accomplished through the use of water injection and a SCR system.

SCR is a post-combustion method for control of NO_x emissions. The SCR process combines vaporized ammonia with NO_x in the presence of a catalyst to form nitrogen and water. The vaporized ammonia is injected into the exhaust gases prior to passage through the catalyst bed. With a new catalyst, the SCR process can achieve up to 90% reduction of NO_x. As the catalyst ages, the maximum NO_x reduction will decrease.

The effect of exhaust gas temperature on NO_x reduction depends on the specific catalyst formulation and reactor design. Generally, SCR units can be designed to achieve effective NO_x control over a 100-300°F operating window within the bounds of 450-800°F, although recently developed zeolite-based catalysts are claimed to be capable of operating at temperatures as high as 950°F.

Most commercial SCR systems operate over a temperature range of about 600-750°F. At levels above and below this window, the specific catalyst formulation will not be effective and NO_x reduction will decrease. Operating at high temperatures can permanently damage the catalyst through sintering of surfaces.

Increased water vapor content in the exhaust gas (as would result from water or steam injection in the gas turbine combustor) can shift the operating temperature window of the SCR reactor to slightly higher levels.

Although technically feasible, the applicant has rejected using SCR on the combined cycle because of economic, energy, and environmental impacts. The applicant has identified the following limitations:

- a) Reduced power output.
- b) Emissions of unreacted ammonia (slip).
- c) Disposal of hazardous waste generated (spent catalyst).
- d) Ammonium bisulfate and ammonium sulfate particulate emissions (ammonium salts) due to the reaction of NH₃ with SO₃ present in the exhaust gases.
- e) The energy impacts of SCR will reduce potential electrical power generation by 0.8 percent.

- f) Incremental cost effectiveness for the application of SCR technology to the Orange Cogeneration L.P. project was considered to be \$7,970 when emissions are at 25 ppm and \$23,510 when emissions are at 15 ppm. Since SCR has been determined to be BACT for gas turbines, the EPA has clearly stated that there must be unique circumstances to consider the rejection of such control on the basis of economics.

In a letter from EPA Region IV to the Department regarding the permitting of a combined cycle facility (Tropicana Products, Inc.), the following statement was made:

"In order to reject a control option on the basis of economic considerations, the applicant must show why the costs associated with the control are significantly higher for this specific project than for other similar projects that have installed this control system or in general for controlling the pollutant."

The cost associated with controlling NO_x emissions must take into account the potential operating problems that can occur with using SCR.

A concern associated with the use of SCR on combustion turbines is the formation of ammonium bisulfate. For the SCR process, ammonium bisulfate can be formed due to the reaction of sulfur in the fuel and the ammonia injected. The ammonium bisulfate formed has a tendency to plug the tubes of the heat recovery steam generator leading to operational problems. As this is the case, SCR has been judged to be technically infeasible in some previous BACT determinations. This salt also increases particulate matter (PM/PM₁₀) emissions.

For natural gas/equivalent biogas firing operation, NO_x emissions can be controlled with up to a 90 percent efficiency using a 1 to 1 or greater ammonia injection ratio. When the injection ratio is lowered, there is not a problem with ammonium bisulfate formation since essentially all of the ammonia is able to react with the nitrogen oxides present in the combustion gases. Based on this strategy, SCR has been both proposed and established as BACT with NO_x emission limits ranging from 11.7 to 25 ppmvd depending on the efficiency of control established.

The applicant has indicated that the total levelized annual operating cost to install SCR on two CTs for this project at 100 percent capacity factor and burning natural gas/equivalent biogas is \$1,648,000. A SCR would reduce the NO_x emissions by 207 TPY during the first 2 years of operation when the CTs emit 25 ppmvd @ 15% O₂. Thereafter, when dry-low NO_x controls are used, a SCR would reduce NO_x emissions by 120 TPY. When these reductions are taken into consideration, the total cost with SCR is \$21,900 per

ton of NO_x removed. This calculated cost is higher than has previously been approved as BACT.

A review of the latest Department BACT determinations show limits of 15 ppmvd (natural gas) using dry low-NO_x combustor technology for gas turbines. Most combustion turbine manufacturers are currently developing programs using both steam/water injection and dry low-NO_x combustor technology to achieve a NO_x emission control level of 9 ppm when firing natural gas. Therefore, this technology will likely be available by 1998.

BACT Determination for NO_x for the CTs by the Department

NO_x Control

The information that the applicant presented and Department calculation indicate that the cost per ton of controlling NO_x for this turbine [\$21,900 per ton] is high compared to other BACT determinations which require SCR. Based on the information presented by the applicant, the Department believes that the use of SCR for NO_x control is not justifiable as BACT at this time.

A review of the permitting activities for combustion turbine proposals across the nation indicates that SCR has been required and most recently proposed for installations with a variety of operating conditions (i.e., natural gas, fuel oil, and various capacity factors). Although, the cost and other concerns expressed by the applicant are valid, the Department, in this case, is willing to accept water/steam injection and dry low-NO_x combustor technology design as BACT for this project for a limited time (up to 12/31/97).

It is the Department's understanding that combustion turbine manufacturers are developing programs using either steam/water injection or dry low NO_x combustor technology to achieve a NO_x emission control level of 9 ppm when firing natural gas.

Based on this, the Department has determined to revise and lower the allowable BACT limit for this project to 15 ppmvd at 15% O₂ and is to be achieved no later than 1/1/98.

Carbon Monoxide (CO)

CO emissions are caused by incomplete combustion of the fossil fuel. The applicant investigated the use of combustion control and catalytic oxidation to control CO emission. With combustion control, CO emissions would be 30 ppmvd (236 TPY). With catalytic oxidation, CO emissions would be 10 ppmvd (78 TPY). The annualized cost of the catalyst system is \$834,700 or \$5,280 per ton of CO removed.

BACT Determination for CO for the CTs by the Department

Because catalytic oxidation would increase operation cost by \$5,280 per ton of CO removed, and have no significant reduction in ambient air quality, the Department accepts an emission limit for CO of 30 ppmvd obtained through combustion control as BACT for these CTs.

Volatile Organic Compounds (VOC)

VOC emissions are caused by incomplete combustion of fossil fuel. The applicant proposes to meet an emission limit of 10 ppmvd through the use of clean fuel (natural gas) and combustion controls. This is similar to the BACT applied to other similar sources.

BACT Determinations for VOC for the CTs by the Department

The Department accepts an emission limit for VOC of 10 ppmvd obtained through the use of clean fuel (natural gas) and combustion control as BACT for these CTs.

Particulate Matter (PM/PM₁₀)

PM/PM₁₀ emissions are caused by incomplete combustion and traces of solids in the fuel. Proper combustion of clean fuel will emit only trace amounts of PM/PM₁₀. Each proposed CT will emit 5 lbs/hr of PM/PM₁₀ or about 0.01 grains per standard cubic foot (gr/dscf). This is similar to the PM/PM₁₀ emissions that can be met with the best air pollution control device, a baghouse.

BACT Determination for PM/PM₁₀ for the CTs by the Department

The Department accepts an emission limit for PM/PM₁₀ of 5 lbs/hr and a visible emissions limit of 10 percent opacity as BACT for each CT.

BACT Pollutant Analysis for the Auxiliary Boiler

Nitrogen Oxides (NO_x)

Nitrogen oxide emissions from boilers can be controlled by selective catalytic reduction (SCR), flue gas recirculation (FGR), and low-NO_x combustors.

The applicant proposes to meet a NO_x emission limit of 0.13 lbs/MMBtu through the use of low-NO_x combustors. This emission limit is below the new source performance standard for large boilers. The cost of using SCR or FGR would exceed \$5,000 per ton NO_x removed.

BACT Determination for NO_x for the Auxiliary Boiler by the Department

The Department accepts an emission limit for NO_x of 0.13 lbs/MMBtu as BACT for this auxiliary boiler.

Particulate Matter (PM/PM₁₀), Carbon Monoxide (CO), and Volatile Organic Compounds (VOC)

PM/PM₁₀, CO and VOC are the products of incomplete combustion of fossil fuel. The applicant proposes to meet emission limits of 0.01 lbs PM/MMBtu, 0.10 lbs CO/MMBtu, 0.04 lbs VOC/MMBtu through the use of clean fuel (natural gas/biogas) and good combustion control. Visible emissions shall not exceed 15 percent opacity.

BACT Determination for PM/PM₁₀, CO, and VOC for the Auxiliary Boiler by the Department

The Department accepts the use of clean fuel (natural gas/biogas) and good combustion controls to meet the proposed emission limits for PM/PM₁₀, CO, and VOC as BACT for this auxiliary boiler.

Sulfur Dioxide (SO₂)

Sulfur dioxide emissions are caused by the oxidation of sulfur in the fuel. Natural gas/biogas contains only trace amounts of sulfur - 1 grain per 100 cubic feet (gr/100 CF). This will result in an estimated sulfur dioxide emission of 0.30 lbs/hr. Cleaner fuel is not available; and add on controls for SO₂ are not justified at this low emission rate.

BACT Determination for SO₂ for the Auxiliary Boiler by the Department

Natural gas/equivalent biogas fuel containing a maximum of 1 gr/100 CF is accepted as BACT for SO₂ control for this auxiliary boiler.

Summary of the Revised BACT Determination by Department

Pollutant	Emission Limits	EPA Test Methods
COMBUSTION TURBINE		
NO _x	25 ppmvd @ 15% O ₂ until Dec. 31, 1997	20
	15 ppmvd @ 15% O ₂ after Dec. 31, 1997	20
CO	30 ppmvd	10
VOC	10 ppmvd	18 or 25A

PM/PM ₁₀ *	5 lbs/hr	5 or 17**
Visible Emissions	10% Opacity	9
AUXILIARY BOILER		
NO _x	0.13 lbs/MMBtu	7E
PM/PM ₁₀ *	0.01 lbs/MMBtu	5 or 17**
CO	0.10 lbs/MMBtu	10
VOC	0.04 lbs/MMBtu	18 or 25A
SO ₂	1 gr sulfur/100 CF gas	fuel sulfur analysis
Visible Emissions	15% Opacity	9

* Assumption is that all PM is PM₁₀.

** Stack flue gas temperature must be less than 320°F.

Details of the Analysis May be Obtained by Contacting:
Martin Costello, P.E., BACT Coordinator
Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Recommended by:

Approved by:

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

Virginia B. Wetherell
Virginia B. Wetherell, Secretary
Dept. of Environmental Protection

Date

2/24/95

Date

B-7-95

Document ID OC-FI-013
RMP Verification

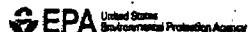
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Facility Name: Orange Cogeneration Facility
EPA ID: 1000 0005 0516

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460
OFFICE OF SOLID WASTE AND EMERGENCY RESPONSE

Dennis J. Oehring
CSW Energy, Inc - Orange Operations
1901 Clear Springs Road
Bartow, FL 33830

June 24, 1999

EPA Facility ID#: 1000 0005 0516
Postmark Date: 06/15/1999
Anniversary Date: 06/15/2004

RMP Reporting Center
P.O. Box 3346
Merrifield, VA 22116-3346

NOTIFICATION LETTER: COMPLETE RMP

The U.S. Environmental Protection Agency (EPA) received your Risk Management Plan (RMP) dated with the above postmark date. This letter notifies you that your RMP is "complete" according to EPA's completion check. The completion check is a program implemented by EPA to determine whether a submitted RMP includes the minimum amount of information every RMP must provide. The completion check does not assess whether a submitted RMP should have provided additional information or whether the information it provides is accurate or appropriate. In other words, it does not indicate that the RMP meets the requirements of 40 CFR Part 68.

Please note the anniversary date indicated above. Your RMP must be revised and updated by this date or earlier as required by 40 CFR §68.190. Please also note your EPA Facility ID number as identified at the top of this letter; all future Risk Management Plan submissions, corrections and other correspondence must include this number.

Your RMP (excluding the Offsite Consequence Analysis data) can be viewed on RMP*Info™, a national database on the Internet at <http://www.epa.gov/enviro>.

If you have any questions, please call one of the following numbers:

(1) For RMP rule interpretation questions, call the EPCRA Hotline at (800) 424-9346 or (703) 412-9810 (in the D.C. Metro area).

(2) For RMP*Submit installation and software questions, or information on the status of your RMP, contact the RMP Reporting Center at (703) 816-4434, or write to the:

(3) For more information on the Risk Management Program, you can contact your Implementing Agency. Your Implementing Agency is Florida Department of Community Affairs, 2555 Shumard Oak Boulevard, Tallahassee, FL, 32399, Phone: 850-413-9970.

Thank you for your cooperation in this matter.

Sincerely,

RMP Reporting Center

Enclosure:
Risk Management Plan (if submitted on paper)

Document ID OC-FI-014
Compliance Report and Plan

ORANGE COGENERATION, L.P.
ORANGE COGENERATION FACILITY

TITLE V OPERATING PERMIT RENEWAL APPLICATION
DOCUMENT ID OC-FI-014

COMPLIANCE REPORT & PLAN
MAY 24, 2002

COMPLIANCE REPORT & PLANINTRODUCTION

The Title V operating permit program defines a major source within Rule 62-210.200, F.A.C. Under this definition, the Orange Cogeneration Facility is classified as a major source based on potential emissions of 100 tons per year or more of carbon monoxide and oxides of nitrogen. Emissions of these pollutants are generated during the combustion of natural gas and biogas within the combustion turbines and the auxiliary boiler. As a major source, the Orange Cogeneration Facility is required to have a Title V Operating Permit and to renew the permit every five (5) years. The current Title V operating permit renewal application is scheduled for submittal to the FDEP's Tallahassee Office on or before July 5, 2002.

In early April of 2002, CSW Energy contracted Foster Wheeler Environmental Corporation to develop the renewal application for the facility. As part of the application development process, Foster Wheeler Environmental reviewed the existing emissions inventory and completed a regulatory compliance assessment of the facility. Foster Wheeler Environmental's assessment focused on the following areas:

- ◆ Current Title V Operating Permit and
- ◆ New Federal and State Regulations.

The requirement to develop a Compliance Report is contained within Rule 62-210.900(1), F.A.C. as part of the instructions for completing the application form. In accordance with the instructions, the Compliance Report must address the compliance status of each emissions unit with respect to each applicable requirement and provide a description of the activities taken to achieve compliance. The Compliance Report forms the basis of the Compliance Certification, which must be signed by the Responsible Official. The signed Compliance Certification certifies the truth, accuracy, and completeness of the Compliance Report and the renewal application.

Based on the available information, the facility was found to be in compliance with the permitting requirements, the emission limiting standards, and the monitoring and reporting requirements contained in the current Title V Operating Permit.

SOURCE DESCRIPTION

The Orange Cogeneration Facility can produce approximately 107 mega-Watts (MW) of electrical power. The facility includes two combustion turbines (CT) and an auxiliary boiler. The CTs are each equipped with a heat recover steam generator (HRSG) and authorized to fire either natural gas or biogas. The auxiliary boiler also fires natural gas or biogas. The facility is located at 1901 Clear Springs Road, Bartow, Polk County, Florida. The facility is located within an area designated as attainment for ozone, sulfur dioxide, carbon monoxide, and nitrogen dioxide, and unclassifiable for lead and PM-10.

The facility is considered a new major source under the federal and State preconstruction review regulations (40 CFR 52.21, Chapters 62-210.300, 62-212.300, and 62-212.400, F.A.C.). The facility is also classified as a major source under the Title V operating permit program (40 CFR Part 70 and Chapter 62-210.200, F.A.C.), an affected source under the Acid Rain Program (40 CFR Part 72 and Rule 62-214, F.A.C.) and a minor source under the Title III or hazardous air pollutant program (Title III of the 1990 CAAA).

The regulated emissions units at the facility include the following:

- ◆ Two Combustion Turbines (40 CFR Part 60, Subpart GG)
- ◆ Fossil-fuel Fired Steam Generator (40 CFR Part 60, Subpart Dc)

In addition to the regulated emissions units, the facility includes insignificant and/or exempt emissions units and/or activities as listed in Document OC-FI-008 of the Title V Operating Permit Renewal Application. Document OC-FI-008 provides a description of each emissions unit or activity, its category (i.e., point, area or fugitive, its regulatory status (insignificant, exempt or unregulated) and its compliance status (in or out).

REGULATORY APPLICABILITY AND COMPLIANCE

The Title V Renewal Application contains the comprehensive list of air pollution regulations applicable to the facility. For purposes of the assessment, Foster Wheeler Environmental examined the existing regulations as of May 20, 2002 for purposes of assessing applicability and compliance. In addition, applicability and compliance were assessed against the following:

- ◆ Current Title V Operating Permit and

◆ New Federal and State Regulations

The compliance assessment included contact with the FDEP Enforcement Coordinator in Tampa, a site visit on May 22, 2002, and the review and evaluation of the permit requirements, emission limitations, and other requirements as noted below.

PERMITS

Chapter 403.061(14) of the Florida Statutes (FS) provides the FDEP with the authority to establish a permit system for the operation, construction or expansion of any air pollution source. Permits issued under this authorization are subject to the processing requirements of the Administrative Procedures Act, Chapter 120, F.S. The FDEP's permitting program begins in Chapter 62-4, F.A.C., which establishes the general requirements of the program including a prohibition on the construction, modification, or operation of a stationary installation without the appropriate and valid permits. Chapters 62-210, 62-212, 62-213 and 62-214, F.A.C. establish specific requirements of the FDEP's permitting programs.

Within Rule 62-210.300, F.A.C., the FDEP has established a requirement for all emissions units to obtain air pollution permits unless specifically exempted under 62-210.300(3) or exempted under the provisions of Chapter 62-4.040, F.A.C. The FDEP's specific permitting requirements for air pollution sources include the following:

- ◆ Rule 62-210.300(1) - Requires air construction permits for new or modified emissions units;
- ◆ Rule 62-210.300(2) - Requires air operation permits for all emissions units; and
- ◆ Rule 62-210.300(3) - Categorical and generic emission unit exemptions.

The requirement for construction or modification permits includes major source permitting under the Prevention of Significant Deterioration (PSD) and New Sources Review for Nonattainment Areas (NSR-NAA) as specified in Rule 62-212, F.A.C. The requirement for operation permits includes major source permitting under Title V as specified in Rule 62-213, F.A.C. The Acid Rain permit requirements are contained within Rule 62-214, F.A.C.

EMISSION LIMITATIONS

Chapter 403.061(7) of the Florida Statutes (FS) provides the FDEP with the authority to establish rules and regulations establishing emission limitations. The FDEP's emission limiting standards include both the general and specific requirements of Chapter 62-296, F.A.C. and the federal requirements adopted within Rule 62-204.800, F.A.C. In addition, Chapter 62-212, F.A.C., establishes Best Available Control Technology (BACT) and Lowest Achievable Emission Rate (LAER) requirements for new or modified major sources.

Within Chapter 62-296, F.A.C., the FDEP has adopted regulations that limit emissions and establish performance standards for a variety of emissions units. In addition, the FDEP has established emission limitation in the current operating permits. The regulations reviewed included the following:

- ◆ Rule 62-296.320, F.A.C. - General Pollutant Emission Limiting Standards
- ◆ Rule 62-296.401-17, F.A.C - Specific Emission Limiting and Performance Standards
- ◆ Rule 62-296.500, F.A.C. - Reasonably Available Control Technology (RACT) for Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx) Emitting Facilities
- ◆ Rule 62-296.570, F.A.C. - Reasonably Available Control Technology (RACT) for major VOC and NOx Emitting Facilities
- ◆ Rule 62-296.600, F.A.C. - Reasonably Available Control Technology (RACT) for Lead
- ◆ Rule 62-296.700, F.A.C. - Reasonably Available Control Technology (RACT) for Particulate Matter
- ◆ Rule 62-204.800(7), F.A.C. - New Source Performance Standards (NSPS)
- ◆ Rule 62-204.800(8), F.A.C. - National Emission Standards for Hazardous Air Pollutants (NESHAP) - Part 61
- ◆ Rule 62-204.800(9), F.A.C. - National Emission Standards for Hazardous Air Pollutants for Source Categories - Part 63

OTHER REQUIREMENTS

In addition to the requirements for permits and the emission limitations and performance standards presented above, compliance was also assessed versus the other federal and state requirements. These other requirements include any testing, recordkeeping, reporting, and/or notification requirements. These requirements can be specified either by regulation or contained within a specific condition of an air pollution permit.

The regulations and permits reviewed included the following:

Regulations

- ◆ Chapter 62-4, F.A.C. - Permits
- ◆ Chapter 62-102, F.A.C. - Rules of Administrative Procedures - Rulemaking
- ◆ Chapter 62-103, F.A.C. - Rules of Administrative Procedures - Final Agency Action (Non-Rulemaking) and Appeal
- ◆ Chapter 62-150, F.A.C. - Hazardous Substance Release Notification
- ◆ Chapter 62-210, F.A.C. - Stationary Sources - General Requirements
- ◆ Chapter 62-212, F.A.C. - Stationary Sources - Preconstruction Review
- ◆ Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution
- ◆ Chapter 62-214, F.A.C. - Requirements for Sources Subject to the Federal Acid Rain Program
- ◆ Chapter 62-252, F.A.C. - Gasoline Vapor Control
- ◆ Chapter 62-256, F.A.C. - Open Burning and Frost Protection Fires
- ◆ Chapter 62-257, F.A.C. - Asbestos Removal
- ◆ Chapter 62-296, F.A.C. - Stationary Sources - Emission Standards
- ◆ Chapter 62-297, F.A.C. - Stationary Sources - Emissions Monitoring
- ◆ Chapter 120, F.S. - Administrative Procedures Act
- ◆ Chapter 403, F.S. - Environmental Control

Permits

- ◆ PSD-FL-206A and PSD -FL-206B
- ◆ 1050231-001-AV

The review examined the applicable regulations including procedural requirements and rights established under the regulations. The compliance assessment focused on specific requirements within the regulations that could be evaluated and a compliance status reported. These requirements included renewing permits, annual testing schedules, recordkeeping, and reporting requirements.

OBSERVATIONS AND FINDINGS

Foster Wheeler Environmental assessed compliance based on the emissions unit inventory, the regulations, and the current Title V Operating Permit. Foster Wheeler Environmental's findings included the following:

Combustion Turbines (CTs)

Permitting Requirements: No activities were noted that would have triggered the requirements for a permit modification or new permit at the facility. As a result, the emissions units was reported to be in compliance with the preconstruction review permitting requirements of the Rules 62-4, 62-210.300 and 62-212.300, F.A.C. Foster Wheeler Environmental also noted that the facility was in compliance with the requirement to have a Title IV Acid Rain Permit and a Title V Operating Permit.

Emission Limitations: During the site visit, the CTs were in a start-up mode and review of the available CEMS data and the most recent test data available indicated that the emissions units were operating in compliance with the emission limiting standards.

Other Requirements: Other requirements include testing, monitoring, reporting and recordkeeping as specified in the Title IV Acid Rain Permit and the Title V Operating Permit. The compliance evaluation was based on an interview with the Plant Engineer and discussions with the FDEP's District Office. Based on available information the emissions units were found to be in compliance with the applicable requirements.

Auxiliary Boiler

Permitting Requirements: No activities were noted that would have triggered the requirements for a permit modification or new permit at the facility. As a result, the emissions unit was found to be in compliance with the preconstruction review permitting requirements of the Rules 62-4, 62-210.300 and 62-212.300, F.A.C. Foster Wheeler Environmental also noted that the facility was in compliance with the requirement to have a Title IV Acid Rain Permit and a Title V Operating Permit. Foster Wheeler Environmental did raise a question regarding the need for the emissions unit to be

included within the Acid Rain Permit since it does not serve an electric generator with a rating of 25 megawatts or more. As a result, Foster Wheeler Environmental recommended that the issue be handled outside the Title V Renewal Process. As a result, the Acid Rain Permit Renewal includes the emissions unit as an affected unit pending additional verification from the U.S. EPA.

Emission Limitations: During the site visit the emissions unit was not in operation and is reportedly on a temporary shutdown since March 1, 2001. As a result, compliance was evaluated based on the results of the last test data, which for natural gas firing the testing was completed in 2000 prior to the temporary shutdown. The most recent test data testing indicates compliance with the emission limiting standards, the NSPS sulfur content limitation (0.8% by wt), the BACT sulfur content limit (1 grain per dry standard cubic foot of natural gas) and the opacity standard for natural gas firing as contained in the current Title V Operating Permit.

Other Requirements: Other requirements include testing, monitoring, reporting and recordkeeping as specified in the Title IV Acid Rain Permit and the Title V Operating Permit. The compliance evaluation was based on an interview with the Plant Engineer and discussions with the FDEP's District Office. Based on available information the emissions unit was found to be in compliance with the applicable requirements.

Foster Wheeler Environmental also noted that the facility is not under any current enforcement actions by the FDEP or U.S. EPA at the time of the evaluation. The evaluation found the source and emissions units to be in compliance with applicable requirements. Foster Wheeler Environmental also evaluated applicability of the following regulations for purposes of renewing the Title V Operating Permit. These included the following: ✓

- ◆ **Compliance Assurance Monitoring (CAM) Plan Requirements** – Based on review of the regulations (40 CFR Part 64) Foster Wheeler Environmental determined that the regulation and associated requirements are not applicable to the CTs or the Auxiliary Boiler. This finding is based on the applicability of the regulation, which addresses the use of add-on air pollution control systems. ✕
- ◆ **Proposed MACT and MACT Hammer for Combustion Turbines** – Based on the minor source status under the Title III Hazardous Air Pollutant Program, these requirements will not apply to the Orange Cogeneration Facility.

COMPLIANCE PLAN

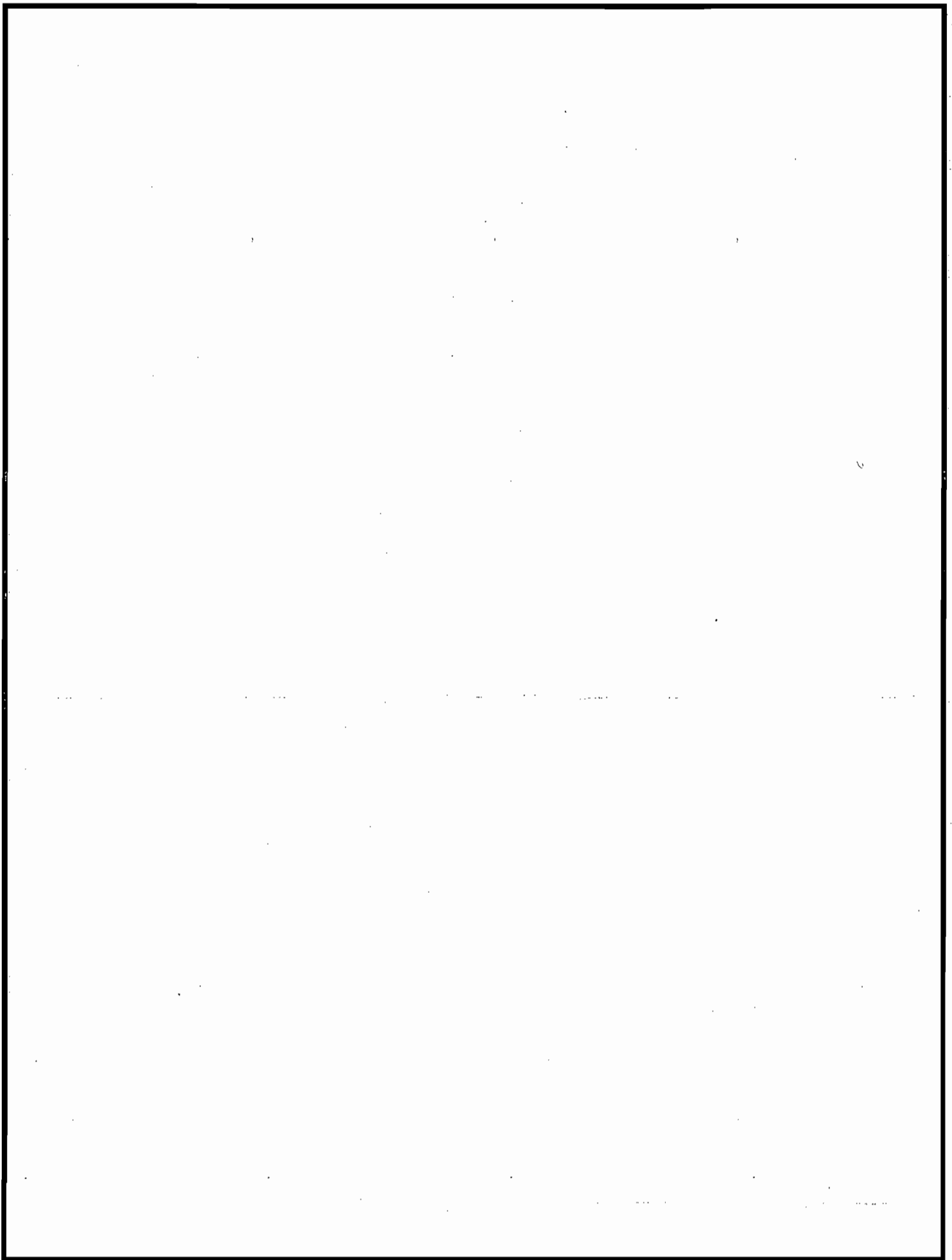
None.

Prepared By: Darrel J. Graziani, P.E., Foster Wheeler Environmental Corporation

Prepared For: Orange Cogeneration Facility

Darrel J. Graziani
Signature

June 22, 2002
Date



Document ID OC-FI-015
Compliance Certification

OC-FI-015

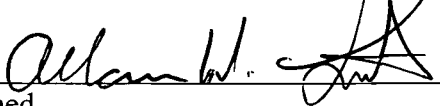
COMPLIANCE CERTIFICATION

In accordance with the instructions for the Florida Department of Environmental Protection's Form No. 62-210.900(1), F.A.C., and Rule 62-213.420(3)(j), F.A.C., a compliance statement must be included in each application for an air pollution permit (i.e., Construction, Modification, State Operating or Title V Operating Permit). This Compliance Certification is intended to meet the requirements of the instructions and the regulation.

CERTIFICATION STATEMENT

"I, the undersigned, am the responsible official as defined in Chapter 62-210.200, F.A.C., of the Title V Source for which this report is being submitted. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made and data contained in this report are true, accurate and complete.

Signed



Date

7/1/02

EMISSIONS UNIT 001
COMBUSTION TURBINE WITH HRSG

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

**A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)**

Emissions Unit Description and Status

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):</p> <p style="text-align: center;">Combustion Turbine (CT) with HRSG</p>			
<p>4. Emissions Unit Identification Number: 001</p>		<p><input type="checkbox"/> No ID</p> <p><input type="checkbox"/> ID Unknown</p>	
<p>5. Emissions Unit Status Code:</p> <p style="text-align: center;">A</p>	<p>6. Initial Startup Date:</p> <p style="text-align: center;">6/16/1995</p>	<p>7. Emissions Unit Major Group SIC Code:</p> <p style="text-align: center;">49</p>	<p>8. Acid Rain Unit?</p> <p style="text-align: center;"><input checked="" type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p> <p>The combustion turbine (CT) is a GE LM 6000 DLE model with a nameplate rating of 41.4 MW at ISO. The CT is authorized to burn natural gas or biogas. Natural gas is the primary fuel and biogas can be used when available. The HRSG provides steam to a 24.2 MW turbine/generator set and other facilities.</p>			

Emissions Unit Information Section 1 of 4

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

Control Methods:

Natural Gas and Biogas Firing – Emissions control strategy includes the use of **Dry Low NOx Combustors and Damp DLE Technology** for NOx emissions coupled with good combustion practices for VOC, CO, and PM/PM10 emissions, and **Clean Pipeline Quality Natural Gas** for SO₂ emissions. The control strategy ensures compliance with the BACT emission limitations.

2. Control Device or Method Code(s): **025, 028 and , 030.**

Emissions Unit Details

1. Package Unit: Combustion Turbine Manufacturer: GE	Model Number: LM 6000 DLE
2. Generator Nameplate Rating: 41.4	MW
3. Incinerator Information: Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

**B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)**

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	377.0 mmBtu/hr	
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):	<p>It is requested that the revised PSD and Title V Operating Permits reference the maximum heat input rate to an ambient temperature of 47° F and a lower heating value of natural gas of 946 BTUs per standard cubic foot.</p> <p>This reflects the requested heat input rate increase associated with the adjusted fuel consumption rate as discussed in OC-FI-006.</p>	

**C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)**

List of Applicable Regulations	
Rule 62-204.800(7)(b)39., F.A.C.	Rule 62-204.800(15), F.A.C
Rule 62-204.800(16), F.A.C.	Rule 62-204.800(17), F.A.C.
Rule 62-204.800(19), F.A.C.	Rule 62-210.700, F.A.C., except (2) & (3)
Rule 62-214, F.A.C.	Rule 62-297.310(1), (2), (3), F.A.C.
Rule 62-297.310(4)(a), (b) and (d), F.A.C.	Rule 62-297.310(5), (6), F.A.C.
Rule 62-297.310(7)(a)3., 4., 8. & 9. F.A.C.	Rule 62-297.310(7)(b) & (c), F.A.C.
Rule 62-297.310(8), F.A.C.	Rule 62-297.401(1), (2), (3), (4), (5) & (9), F.A.C.
Rule 62-297.401(10) & (20), F.A.C.	Rule 62-297.520(2) & (3), F.A.C.
40 CFR 60.330	40 CFR 60.331
40 CFR 60.332(a)(1) & (f)	40 CFR 60.333
40 CFR 60.334	40 CFR 60.335
40 CFR Part 60 Appendix B	40 CFR Part 60 Appendix F
40 CFR 72.2	40 CFR 72.6(a)(3)(i) and/or (iv)
40 CFR 72.9(a), (b), (c)(1), (2), (3)(iv), (4), (5), (e)	40 CFR 72.9(f) & (g)
40 CFR 72.11	40 CFR 72.20((c)
40 CFR 72.21	40 CFR 72.22
40 CFR 72.23	40 CFR 72.24(a)
40 CFR 72.25(a) & (b)	40 CFR 72.30(a), (c), (d) & (e)
40 CFR 72.31	40 CFR 72.32
40 CFR 72.33(a), (b), (c) & (d)	40 CFR 72.40
40 CFR 72.50	40 CFR 72.51
40 CFR 72(b)(2)	40 CFR 72.80
40 CFR 72.81	40 CFR 72.82
40 CFR 72.83	40 CFR 72.84
40 CFR 72.85	40 CFR 72.90
40 CFR Part 72, Appendices A, B & D	40 CFR 73.2(a)
40 CFR 73.12	40 CFR 73.13(a)
40 CFR 73.31(b)	40 CFR 73.33(c)
40 CFR 73.35	40 CFR 73.36(a)
40 CFR 73.37(a), (c) & (e)	40 CFR 73.50(b)
40 CFR 73.71, except (e)	40 CFR 75.2(a)
40 CFR 75.4(b)(2), (e) & (g)	40 CFR 75.5

Emissions Unit Information Section 1 of 4

**D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)**

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? Stack – EU1		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 100 feet	7. Exit Diameter: 11 feet	
8. Exit Temperature: 230 °F	9. Actual Volumetric Flow Rate: 298,651 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: 17 East (km): 418.7 North (km): 3083.6			
14. Emission Point Comment (limit to 200 characters):			

Emissions Unit Information Section 1 of 4

**E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)**

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Internal Combustion Engines; Electric Generation; Natural Gas Turbine		
2. Source Classification Code (SCC): 2-01-002-01		3. SCC Units: million cubic feet burned
4. Maximum Hourly Rate: 0.399	5. Maximum Annual Rate: 3,491	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 946
10. Segment Comment (limit to 200 characters): Maximum hourly and annual rates based on operation at 47°F and a lower heating value of natural gas based on 946 Btu/CF.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Internal Combustion Engines; Electric Generation; Biogas, Turbine		
2. Source Classification Code (SCC): 2-01-999-99		3. SCC Units: Million Cubic Feet Burned (All Gaseous Fuels)
4. Maximum Hourly Rate: 0.399	5. Maximum Annual Rate: 3,491	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.1	8. Maximum % Ash:	9. Million Btu per SCC Unit: 946
10. Segment Comment (limit to 200 characters): The CT is capable of firing biogas when available. Maximum hourly and annual rates based on operation at 47°F and a lower heating value of natural gas based on 946 Btu/CF. Maximum sulfur content has been limited to 1 grain/100 cf.		

Emissions Unit Information Section 1 of 4

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: NOx	2. Total Percent Efficiency of Control: 90%+
3. Potential Emissions: 22.1 lb/hour 97.0 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: See Comment Reference: BACT Determination	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): Annual NOx = 22.1 lb/hr X 8,760 hr/yr / 2000lb/ton = 96.8 TPY (Set at 97.0 by PSD Permit)	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emissions based on allowables as specified in the PSD and Title V permits.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Rule	2. Future Effective Date of Allowable Emissions: N/A
3. Requested Allowable Emissions and Units: 15 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 22.1 lb/hour ✓ 97.0 tons/year ✓
5. Method of Compliance (limit to 60 characters): Continuous Emissions Monitor System (CEMS) (EPA Method 20 if Requested by the Department)	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Allowable emissions based on the application of BACT as required by Rule 62-212, F.A.C. and as determined by the Department. Excess emissions allowed per condition III.C.2. of the Title V Operating Permit and Rule 62-210.700(1), F.A.C.	

Emissions Unit Information Section 1 of 4

Potential/Fugitive Emissions

1. Pollutant Emitted: CO	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 27.8 lb/hour 121.8 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: See Comment Reference: BACT Determination	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): Annual CO = 27.8 lb/hr X 8,760 hr/yr / 2000lb/ton = 121.8 TPY (PSD & Title V Limit – 127 TPY)	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emissions based on allowables as specified in the PSD and Title V permits.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Rule	2. Future Effective Date of Allowable Emissions: N/A
3. Requested Allowable Emissions and Units: 30 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 27.8 lb/hour ✓ 121.8 tons/year
5. Method of Compliance (limit to 60 characters): EPA Method 10 <i>127.</i> (Requested Renewal Testing Only)	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Allowable emissions based on the application of BACT as required by Rule 62-212, F.A.C. and as determined by the Department. Excess emissions allowed per condition III.C.2. of the Title V Operating Permit and Rule 62-210.700(1), F.A.C.	

Emissions Unit Information Section 1 of 4

Potential/Fugitive Emissions

1. Pollutant Emitted: VOC	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 4 lb/hour 17.4 tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: See Comment Reference: BACT Determination	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): Annual VOC = 4 lb/hr X 8,760 hr/yr / 2000lb/ton = 17.5 TPY (PSD & Title V Limit – 17.4 TPY)	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emissions based on allowables as specified in the PSD and Title V permits.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Rule	2. Future Effective Date of Allowable Emissions: N/A
3. Requested Allowable Emissions and Units: 10 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 4 lb/hour ✓ 17.4 tons/year ✓
5. Method of Compliance (limit to 60 characters): EPA Methods 18 or 25A (Requested Renewal Testing Only)	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Allowable emissions based on the application of BACT as required by Rule 62-212, F.A.C. and as determined by the Department. Excess emissions allowed per condition III.C.2. of the Title V Operating Permit and Rule 62-210.700(1), F.A.C.	

Emissions Unit Information Section 1 of 4

Potential/Fugitive Emissions

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 5 lb/hour 21.9 tons/year	4. Synthetically Limited? <input type="checkbox"/>
5. Range of Estimated Fugitive Emissions: <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 _____ to _____ tons/year	
6. Emission Factor: See Comment Reference: PSD Permit	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): Annual PM = 5 lb/hr X 8,760 hr/yr / 2000lb/ton = 21.9 TPY	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emissions based on BACT as specified in the PSD and Title V permits. The reported rates reflect operation at 47 °F.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Rule	2. Future Effective Date of Allowable Emissions: N/A
3. Requested Allowable Emissions and Units: 5 pounds per hour	4. Equivalent Allowable Emissions: 5 lb/hour ✓ 21.9 tons/year ✓
5. Method of Compliance (limit to 60 characters): EPA Method 5 or 17 (Requested Renewal testing Only)	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Allowable emissions based on the application of BACT as required by Rule 62-212, F.A.C. and as determined by the Department.	

Emissions Unit Information Section 1 of 4

Potential/Fugitive Emissions

1. Pollutant Emitted: PM10	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 5 lb/hour 21.9 tons/year	4. Synthetically Limited? <input type="checkbox"/>
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: See Comment Reference: PSD Permit	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): Annual PM10 = 5 lb/hr X 8,760 hr/yr / 2000lb/ton = 21.9 TPY	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emissions based on BACT as specified in the PSD and Title V permits. The reported rates reflect operation at 47 °F.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Rule	2. Future Effective Date of Allowable Emissions: N/A
3. Requested Allowable Emissions and Units: 5 pounds per hour	4. Equivalent Allowable Emissions: 5 lb/hour ✓ 21.9 tons/year ✓
5. Method of Compliance (limit to 60 characters): EPA Method 5 or 17 (Requested Renewal testing Only)	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Allowable emissions based on the application of BACT as required by Rule 62-212, F.A.C. and as determined by the Department.	

Emissions Unit Information Section 1 of 4

Potential/Fugitive Emissions

1. Pollutant Emitted: SO₂	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 1.1 lb/hour 4.9 tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: See Comment Reference: PSD Permit	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): $\text{SO}_2 \text{ (lb/hr)} = 377 \times 10^6 \text{ Btu/hr} / 946 \text{ Btu/CF} \times 1 \text{ gr/100CF} / 7,000 \text{ gr/lbm} \times 64/32$ $= 1.1 \text{ lb/hr}$ $\text{Annual SO}_2 = 1.1 \text{ lb/hr} \times 8,760 \text{ hr/yr} / 2000 \text{ lb/ton}$ $= 4.87 \text{ TPY}$	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emissions based on sulfur content limitation specified in the PSD and Title V permits.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Other	2. Future Effective Date of Allowable Emissions: N/A
3. Requested Allowable Emissions and Units: Sulfur Content 1 gr/100 CF	4. Equivalent Allowable Emissions: 1.1 lb/hour 4.9 tons/year
5. Method of Compliance (limit to 60 characters): Custom Fuel Monitoring Schedule	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Allowable emissions based on the requested sulfur content limitation.	

Emissions Unit Information Section 1 of 4

**H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)**

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: Annual, EPA Method 9 <i>(Requested that the Annual VE Requirement be Removed)</i>	
4. Method of Compliance: Annual, EPA Method 9	
5. Visible Emissions Comment (limit to 200 characters): Visible Emissions limited through the construction permits based on the Department's BACT Determination. Excess emissions allowed per condition III.C.3. of the Title V Operating Permit and Rule 62-210.700(1), F.A.C.	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

Emissions Unit Information Section 1 of 4

**I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)**

Continuous Monitoring System: Continuous Monitor 1 of 2

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: Rosemont Model Number: 951C Serial Number: 1000148	
5. Installation Date: 15 April 1995	6. Performance Specification Test Date: 23 May 1995
7. Continuous Monitor Comment (limit to 200 characters): The NOx CEMS functions as a surrogate to the monitoring requirements of 40 CFR 60.334 and a requirement of the Acid Rain Program. It is requested that the renewed Title V Operating Permit and revised PSD permit specify the NOx CEMS as the Reference Method and that it be operated and maintained in accordance with 40 CFR Part 75.	

Continuous Monitoring System: Continuous Monitor 2 of 2

1. Parameter Code: EM	2. Pollutant(s): O₂
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: Servomex Model Number: 1400 B Serial Number: 01420/B409	
5. Installation Date: 15 April 1995	6. Performance Specification Test Date: 23 May 1995
7. Continuous Monitor Comment (limit to 200 characters): The unit is to be operated and maintained in accordance with 40 CFR Part 75.	

Emissions Unit Information Section 1 of 4

**I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)**

Continuous Monitoring System: Continuous Monitor of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): 	

Continuous Monitoring System: Continuous Monitor ____ of ____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters): 	

**J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)**

Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-EU001-001</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-EU001-002</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Description of Stack Sampling Facilities <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-EU001-004</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously submitted, Date: April 2002 <input type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: <u>OC-EU001-006</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-FI-006</u> <input type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment:

Emissions Unit Information Section 1 of 4

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation
 Attached, Document ID: OC-EU001-011 [] Not Applicable

12. Alternative Modes of Operation (Emissions Trading)
 Attached, Document ID: _____ [X] Not Applicable

13. Identification of Additional Applicable Requirements
 Attached, Document ID: OC-FI-012 [] Not Applicable

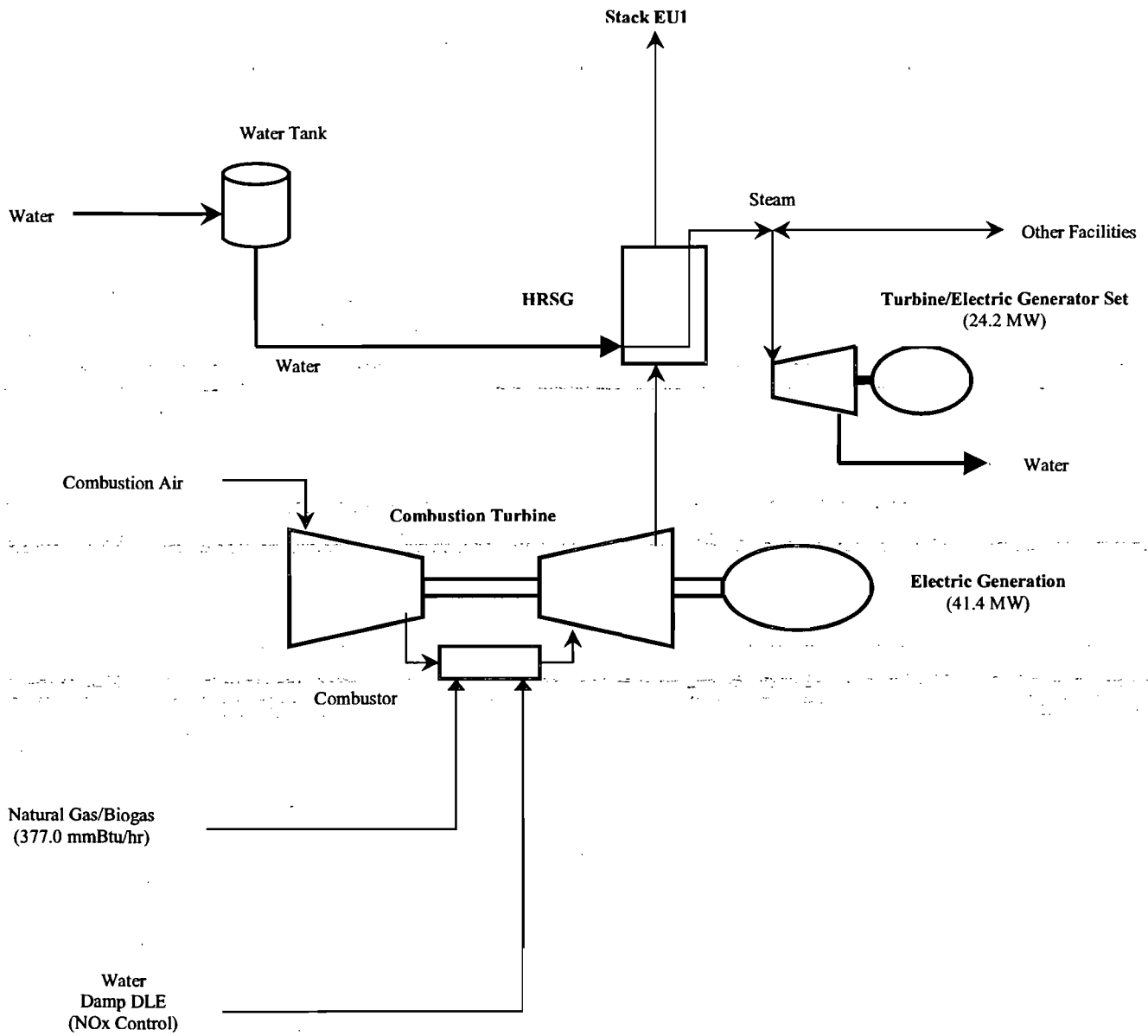
14. Compliance Assurance Monitoring Plan
 Attached, Document ID: _____ [X] Not Applicable

15. Acid Rain Part Application (Hard-copy Required)

- Acid Rain Part - Phase II (Form No. 62-210.900(1)(a))
Attached, Document ID: OC-EU001-015
- Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
Attached, Document ID: _____
- New Unit Exemption (Form No. 62-210.900(1)(a)2.)
Attached, Document ID: _____
- Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
Attached, Document ID: _____
- Phase II NO_x Compliance Plan (Form No. 62-210.900(1)(a)4.)
Attached, Document ID: _____
- Phase NO_x Averaging Plan (Form No. 62-210.900(1)(a)5.)
Attached, Document ID: _____
- Not Applicable

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Document ID OC-EU001-001
Process Flow Diagram



Orange Cogeneration, L.P.
Orange Cogeneration Facility

TITLE V OPERATING PERMIT RENEWAL

Foster Wheeler Environmental Corporation

Scale: N/A	Prepared: DJG	File: OC-EU001-001.doc
Date: 5/20/02	Approved:	Document ID: OC-EU001-001

Source: 1996 Title V Permit Application, Attachment OR-E01-L1,
 Title V Operating Permit & AC/PSD Permits

Document ID OC-EU001-002
Fuel Analyses

Natural Gas Analysis

Date: April 23, 2002

Station: Perry Stream #1

Source: Florida Gas Transmission Line web site (<http://fgtbiz.enron.com/public/webebb/main.asp>)

Heat Content:	1030 Btu/SCF
Carbon Dioxide:	0.901%
Nitrogen (N ₂):	0.278%
Methane:	96.183%
Ethane:	2.045%
Propane:	0.353%
Iso-Butane:	0.090%
n-Butane:	0.074%
iso-Pentane:	0.026%
n-Pentane:	0.015%
C ₆ :	0.035%
Total Sulfur:	0.173 gr/hcf

The above analysis is subject to the following disclosures from the FGT web site:

The data contained herein is preliminary data and therefore should be used for contemporaneous operational purposes only and may be subject to change at month end. This data is provided to assist our customers in tracking their gas usage as closely as possible on a real-time basis. The information contained on this web page is not to be considered billable information. This data will be subject to additional verification and possible modification prior to billing.

Florida Gas makes no warranty or representation whatsoever as to the accuracy of the information provided. This information is provided on a best efforts basis and is an estimate. The information is not used for billing purposes. Florida Gas is not responsible for any reliance on this information by any party.

Foster Wheeler Environmental Corporation
 Natural Gas Heat Content Calculations
 Higher and Lower Heating Values

Prepared By: Darrel J. Graziani, P.E.
 Date: 6/03/2002

Natural Gas Combustion Data

Table 2.1, Combustion Data for Gases, Chemical Engineering Reference Manual, Fourth Edition.

Substance	Formula	MW	lb/cf	Heats of Combustion (Btu/lb)		Required Air (lb/lb)		Combustion Products (lb/lb)			
				HHV	LHV	O2	N2	CO2	H2O	N2	SO2
Carbon	C	12.01		14093	14093	2.664	8.863	3.664	0	8.863	0
Hydrogen	H2	2.016		61100	51623	7.937	26.407	0	8.937	26.407	0
Oxygen	O2	32		0	0	0	0	0	0	0	0
Nitrogen	N2	28.016	7.44E-02	0	0	0	0	0	0	0	0
Carbon Monoxide	CO	28.01		4347	4347	0.571	1.9	1.571	0	1.9	0
Carbon Dioxide	CO2	44.01	7.40E-02	0	0	0	0	0	0	0	0
Methane	CH4	16.041	4.24E-02	23879	21520	3.99	13.275	2.744	2.246	13.275	0
Ethane	C2H6	30.067	8.03E-02	22320	20432	3.725	12.394	2.927	1.798	12.394	0
Propane	C3H8	44.092	1.20E-01	21661	19944	3.629	12.074	2.994	1.634	12.074	0
iso-Butane	C4H10	58.118	1.58E-01	21257	19629	3.579	11.908	3.029	1.55	11.908	0
n-Butane	C4H10	58.118	1.58E-01	21308	19680	3.579	11.908	3.029	1.55	11.908	0
iso-Pentane	C5H12	72.144	1.90E-01	21052	19478	3.548	11.805	3.05	1.498	11.805	0
n-Pentane	C5H12	72.144	1.90E-01	21091	19517	3.548	11.805	3.05	1.498	11.805	0
n-Hexane	C6H14	86.169	2.27E-01	20940	19403	3.528	11.738	3.064	1.464	11.738	0
Sulfur	S	32.06		3983	3983	0.998	3.287	0	0	3.287	1.998

FGT Natural Gas Data

April 23, 2002 posting on the web site of the Florida Gas Transmission Line.

Heat Content Calculation (Btu/SCF)				1029	928
Basis - 1 scf @ 60F & 30	Vol. %	Vol. (scf)	Mass (lb)	HHV	LHV
Carbon Dioxide	9.01E-01	9.01E-03	6.67E+04	0.00E+00	0.00E+00
Nitrogen	2.78E-01	2.78E-03	2.07E-04	0.00E+00	0.00E+00
Methane	9.62E+01	9.62E-01	4.08E-02	9.75E+02	8.78E+02
Ethane	2.05E+00	2.05E-02	1.64E-03	3.66E+01	3.35E+01
Propane	3.53E-01	3.53E-03	4.22E-04	9.15E+00	8.42E+00
iso-Butane	9.00E-02	9.00E-04	1.42E-04	3.03E+00	2.79E+00
n-Butane	7.40E-02	7.40E-04	1.17E-04	2.49E+00	2.30E+00
iso-Pentane	2.60E-02	2.60E-04	4.95E-05	1.04E+00	9.64E-01
n-Pentane	1.50E-02	1.50E-04	2.86E-05	6.02E-01	5.57E-01
n-Hexane	3.50E-02	3.50E-04	7.96E-05	1.67E+00	1.54E+00
Sulfur	-	-	2.47E-07	9.84E-04	9.84E-04

FGT

Last Updated

4/24/02 13:56

	Total Sulfur Previous Day Avg	Total Sulfur Previous Day Avg
	ppm	Grains/hcf

Station Name	04/23/02	04/23/02
Perry 36" Stream #1	2.8	0.173
Perry 30" Stream #2	2.5	0.159
Perry 24" Stream #3	2.4	0.148
Brocker 24" Stream	4.2	0.261

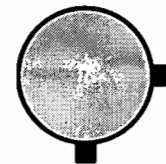
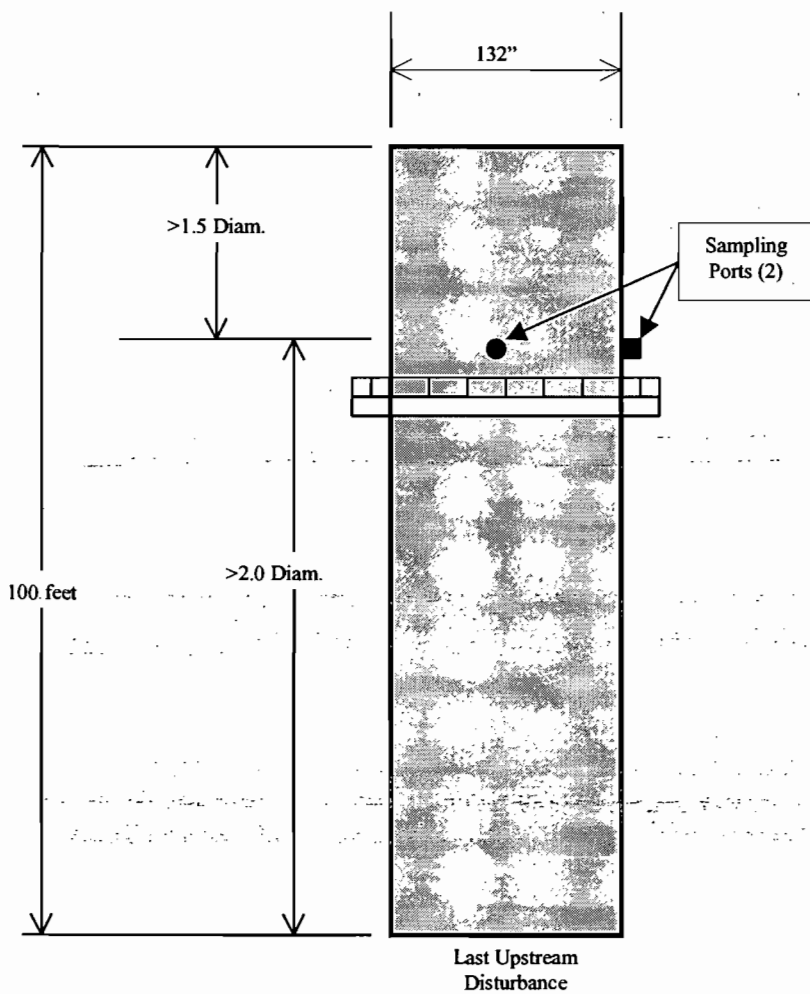
Florida Gas makes no warranty or representation whatsoever as to the accuracy of the This information is provided on a best efforts basis and is an estimate.
The information is not used for billing purposes.
Florida Gas is not responsible for any reliance on this information by any party.

Stream History

Gas Day	Index	Perry 36" Stream #1 15SA36PSUL.A Avg ppm	Perry 36" Stream #1 Avg Grains/hcf	Perry 30" Stream #2 15SA30PSUL.A Avg ppm	Perry 30" Stream #2 Avg Grains/h
04/22/02	33	2.765	0.173	2.538	0.159
04/21/02	32	2.699	0.169	2.385	0.149
04/20/02	31	2.527	0.158	2.420	0.151
04/19/02	30	2.826	0.177	2.860	0.179
04/18/02	29	3.066	0.192	2.380	0.149
04/17/02	28	2.636	0.165	2.933	0.183
04/16/02	27	3.122	0.195	3.277	0.205
04/15/02	26	2.412	0.151	2.901	0.181
04/14/02	25	2.761	0.173	1.717	0.107
04/13/02	24	2.492	0.156	1.684	0.105
04/12/02	23	2.169	0.136	1.635	0.102
04/11/02	22	2.319	0.145	1.524	0.095
04/10/02	21	2.431	0.152	1.617	0.101
04/09/02	20	2.464	0.154	2.259	0.141
04/08/02	19	1.910	0.119	1.744	0.109
04/07/02	18	1.428	0.089	1.650	0.103
04/06/02	17	1.480	0.093	1.693	0.106
04/05/02	16	1.918	0.120	1.790	0.112
04/04/02	15	1.663	0.104	1.622	0.101
04/03/02	14	2.973	0.186	2.116	0.132
04/02/02	13	2.080	0.130	0.937	0.059
04/01/02	12	1.750	0.109	1.171	0.073
03/31/02	11	1.297	0.081	1.428	0.089
03/30/02	10	1.293	0.081	2.036	0.127
03/29/02	9	1.610	0.101	1.569	0.098
03/28/02	8	1.718	0.107	2.174	0.136
03/27/02	7	2.166	0.135	2.227	0.139
03/26/02	6	2.962	0.185	1.924	0.120
03/25/02	5	3.112	0.194	2.031	0.127
03/24/02	4	2.527	0.158	2.191	0.137
03/23/02	3	2.147	0.134	2.496	0.156
03/22/02	2	2.205	0.138	2.119	0.132
03/21/02	1	2.214	0.138	1.862	0.116

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Document ID OC-EU001-004
Stack Sampling Facilities



Traverse Point Number	Inches Inside Stack Wall
1	1.5
2	4.2
3	7.3
4	10.4
5	13.9
6	17.4
7	21.3
8	25.6
9	30.4
10	35.9
11	42.6
12	52.5
13	79.5
14	89.4
15	96.1
16	101.6
17	106.4
18	110.7
19	114.6
20	118.1
21	121.6
22	124.7
23	127.8
24	130.5

Orange Cogeneration, L.P.
Orange Cogeneration Facility

TITLE V OPERATING PERMIT RENEWAL



Foster Wheeler Environmental Corporation

Reference: February 2002 Stack Test Report, Air Consulting & Engineering, Inc.

Scale: N/A
Date: 5/20/02

Prepared: DJG
Approved:

File: OC-EU001-004.doc
Document ID: OC-EU001-004

Document ID OC-EU001-006
Startup/Shutdown Procedures

OC-EU002-006

PROCEDURES FOR START-UP AND SHUTDOWN

Start-up for the combustion turbine (CT) begins with “lighting off” of the machine on natural gas. A period of from two to several hours is required to allow metal temperatures in the heat recovery steam generator (HRSG) and in the steam turbine to equilibrate without undue metal stress, during this time the unit is placed “on the line” and begins sending electrical power to the grid at reduced loads to allow equipment to come up to pressures and temperatures.

NOx emissions are controlled by use of dry-low NOx combustors during start-up and shutdown and continuously monitored along with O₂ concentrations. If excess emissions occur during start-up or shutdown, the nature and cause of the event are identified and recorded. Corrective actions are taken when necessary to correct problems and preventative measures adopted to avoid future problems. At all times, including start-up and shutdown, Best Operating Practices are adhered to and all efforts to minimize both the level and duration of excess emissions are undertaken.

Shutdown is performed by reducing the unit load (Electrical Production) to a minimum level, opening the breaker, which disconnects the unit from the electrical grid, shutting off the fuel and coasting down to a stop.

Reference: 1996 Title V Permit Application, Attachment MB-E01-L6

Document ID OC-EU001-011
Alternative Methods of Operation

OC-EU002-011

ALTERNATIVE METHODS OF OPERATION

The alternative methods of operation include the following:

- ◆ Natural Gas firing
- ◆ Biogas Firing

The alternative methods of operation have all been addressed within the construction permits and the initial Title V Operating Permit.

Document ID OC-EU001-015
Acid Rain Permit Application

Phase II Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30 and 72.31 and Chapter 62-214, F.A.C.

This submission is: New Revised

STEP 1
Identify the source by plant name, State, and ORIS code from NADB

Plant Name Orange Cogeneration Facility	State FL	ORIS Code 54365
------------------------------------------------	-----------------	------------------------

STEP 2 Enter the unit ID# for each affected unit and indicate whether a unit is being repowered and the repowering plan being renewed by entering "yes" or "no" at column c. For new units, enter the requested information in columns d and e.

a Unit ID#	b Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	c Compliance Plan Repowering Plan	New Units	
			d Commence Operation Date	e Monitor Certification Deadline
01	Yes	No	06/16/1995	1/1/1996
02	Yes	No	06/16/1995	1/3/1996
03	Yes	No	06/16/1995	1/1/1996
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			

STEP 3
Check the box if the response in column c of Step 2 is "Yes" for any unit

For each unit that is being repowered, the Repowering Extension Plan form is included.

Plant Name (from Step 1)

STEP 4

Read the standard requirements and certification, enter the name of the designated representative, and sign and date

Standard RequirementsAcid Rain Part Requirements.

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
- (i) Submit a complete Acid Rain part application (including a compliance plan) under 40 CFR part 72 and Rules 62-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
 - (ii) Submit in a timely manner any supplemental information that the Department determines is necessary in order to review an Acid Rain part application and issue or deny an Acid Rain part;
- (2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
- (i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain part issued by the Department; and
 - (ii) Have an Acid Rain Part.

Monitoring Requirements.

- (1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, and Rule 62-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
- (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
- (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1)(i) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain part application, the Acid Rain part, or an exemption under 40 CFR 72.7, 72.8, or 72.14 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements. The owners and operators of the source and each Acid Rain unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements.

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
- (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the Department:
- (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and
- and,

Plant Name (from Step 1)

Recordkeeping and Reporting Requirements (cont)

(iv) Copies of all documents used to complete an Acid Rain part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

(2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability.


- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7, 72.8 or 72.14, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
- (6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities. No provision of the Acid Rain Program, an Acid Rain part application, an Acid Rain part, or an exemption under 40 CFR 72.7, 72.8, or 72.14 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
- (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
- (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Don Walters	
Signature 	Date 7/2/02

Acid Rain Program

Instructions for

Phase II Acid Rain Part Application

(40 CFR 72.30 - 72.31 and Rule 62-214.320, F.A.C.)

The Acid Rain Program regulations require the designated representative to submit an Acid Rain part application for Phase II for each source with an Acid Rain unit. A complete Phase II part application is binding on the owners and operators of the Acid Rain source and is enforceable in the absence of an Acid Rain part until the permitting authority either issues an Acid Rain part to the source or disapproves the application.

Please type or print. The alternate designated representative may sign in lieu of the designated representative. If assistance is needed, contact the title V permitting authority.

STEP 1 Use the plant name and ORIS Code listed on the Certificate of Representation for the plant. An ORIS code is a 4 digit number assigned by the Energy Information Agency (EIA) at the U.S. Department of Energy to power plants owned by utilities. If the plant is not owned by a utility but has a 5 digit facility code (also assigned by EIA), use the facility code. If no code has been assigned or if there is uncertainty regarding what the code number is, contact EIA at (202) 426-1234 (for ORIS codes), or (202) 426-1269 (for facility codes).

STEP 2 For column "a," identify each Acid Rain unit at the Acid Rain source by providing the appropriate unit identification numbers, consistent with the unit identification numbers entered on the Certificate of Representation, with unit identification numbers listed in NADB (for units that commenced operation prior to 1993), and with unit identification numbers used in reporting to DOE and/or EIA. For new units without identification numbers, owners and operators may assign such numbers consistent with EIA and DOE requirements. NADB is the National Allowance Data Base for the Acid Rain Program, and can be downloaded from the Acid Rain Program Website at "www.epa.gov/acidrain/" or obtained on diskette by calling the Acid Rain Hotline. This data file is in dBase format for use on an IBM-compatible PC and requires 2 megabytes of hard drive memory.

For column "c," enter "yes" only if a repowering technology petition has been approved for the unit by U.S. EPA, an initial repowering extension plan was approved by the title V permitting authority and activated by the designated representative, and a repowering extension plan renewing the original repowering extension plan has been included with the current acid rain part application for that unit.

For columns "d" and "e," enter the commence operation date(s) and monitor certification deadline(s) for new units in accordance with 40 CFR 75.4. If the commence operation date or monitor certification date changes after the Phase II part is issued, the designated representative must submit a request for an administrative correction under Rule 62-214.370(6), F.A.C.

Submission Deadlines

For new units, an initial Phase II part application must be submitted to the title V permitting authority at least 24 months before the date the unit commences operation. Phase II acid rain renewal applications must be submitted at least 6 months in advance of the expiration of the acid rain portion of a title V permit, or such longer time as provided for under the title V permitting authority's operating permits regulation.

Submission Instructions

Submit this form and 1 copy to the appropriate title V air permitting authority. If you have questions regarding this form, contact your local, State, or EPA Regional acid rain contact, or call EPA's Acid Rain Hotline at (202) 564-9620.



**CLEAN AIR
MARKET PROGRAMS**



Issues Programs Progress Trading Business

ALLOWANCE TRADING

Trading Basics Allowance Data Allocations Auctions

ATS - Allowances Held Report

Account ID	Account/Plant Name	Allowance Year	Total	State	Representative	
054365000001	Orange Cogeneration Facility	1999	2	FL	Walters	Donald
054365000002	Orange Cogeneration Facility	1999	2	FL	Walters	Donald
054426000001	Mulberry Cogeneration Facility	1999	2	FL	Walters	Donald

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EMISSIONS UNIT 002
COMBUSTION TURBINE WITH HRSG

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

**A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)**

Emissions Unit Description and Status

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):</p> <p style="text-align: center;">Combustion Turbine (CT) with HRSG</p>			
<p>4. Emissions Unit Identification Number: 002</p> <p>ID:</p>		<p><input type="checkbox"/> No ID</p> <p><input type="checkbox"/> ID Unknown</p>	
<p>5. Emissions Unit Status Code:</p> <p style="text-align: center;">A</p>	<p>6. Initial Startup Date:</p> <p style="text-align: center;">6/16/1995</p>	<p>7. Emissions Unit Major Group SIC Code:</p> <p style="text-align: center;">49</p>	<p>8. Acid Rain Unit?</p> <p style="text-align: center;"><input checked="" type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p> <p>The combustion turbine (CT) is a GE LM 6000 DLE model with a nameplate rating of 41.4 MW at ISO. The CT is authorized to burn natural gas or biogas. Natural gas is the primary fuel and biogas can be used when available. The HRSG provides steam to a 24.2 MW turbine/generator set and other facilities.</p>			

Emissions Unit Information Section 2 of 4

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

Control Methods:

Natural Gas and Biogas Firing – Emissions control strategy includes the use of **Dry Low NOx Combustors and Damp DLE Technology** for NOx emissions coupled with good combustion practices for VOC, CO, and PM/PM10 emissions, and **Clean Pipeline Quality Natural Gas** for SO₂ emissions. The control strategy ensures compliance with the BACT emission limitations.

2. Control Device or Method Code(s): **025, 028 and , 030.**

Emissions Unit Details

1. Package Unit: Combustion Turbine Manufacturer: GE	Model Number: LM 6000 DLE
2. Generator Nameplate Rating: 41.4	MW
3. Incinerator Information: Dwell Temperature:	°F
Dwell Time:	seconds
Incinerator Afterburner Temperature:	°F

**B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)**

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	377.0 mmBtu/hr		
2. Maximum Incineration Rate:	lb/hr	tons/day	
3. Maximum Process or Throughput Rate:			
4. Maximum Production Rate:			
5. Requested Maximum Operating Schedule:	24 hours/day	7 days/week	
	52 weeks/year	8,760 hours/year	
6. Operating Capacity/Schedule Comment (limit to 200 characters):	<p>It is requested that the revised PSD and Title V Operating Permits reference the maximum heat input rate to an ambient temperature of 47° F and a lower heating value of natural gas of 946 BTUs per standard cubic foot.</p> <p>This reflects the requested heat input rate increase associated with the adjusted fuel consumption rate as discussed in OC-FI-006.</p>		

**C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)**

List of Applicable Regulations	
Rule 62-204.800(7)(b)39., F.A.C.	Rule 62-204.800(15), F.A.C
Rule 62-204.800(16), F.A.C.	Rule 62-204.800(17), F.A.C.
Rule 62-204.800(19), F.A.C.	Rule 62-210.700, F.A.C., except (2) & (3)
Rule 62-214, F.A.C.	Rule 62-297.310(1), (2), (3), F.A.C.
Rule 62-297.310(4)(a), (b) and (d), F.A.C.	Rule 62-297.310(5), (6), F.A.C.
Rule 62-297.310(7)(a)3., 4., 8. & 9. F.A.C.	Rule 62-297.310(7)(b) & (c), F.A.C.
Rule 62-297.310(8), F.A.C.	Rule 62-297.401(1), (2), (3), (4), (5) & (9), F.A.C.
Rule 62-297.401(10) & (20), F.A.C.	Rule 62-297.520(2) & (3), F.A.C.
40 CFR 60.330	40 CFR 60.331
40 CFR 60.332(a)(1) & (f)	40 CFR 60.333
40 CFR 60.334	40 CFR 60.335
40 CFR Part 60 Appendix B	40 CFR Part 60 Appendix F
40 CFR 72.2	40 CFR 72.6(a)(3)(i) and/or (iv)
40 CFR 72.9(a), (b), (c)(1), (2), (3)(iv), (4), (5), (e)	40 CFR 72.9(f) & (g)
40 CFR 72.11	40 CFR 72.20((c)
40 CFR 72.21	40 CFR 72.22
40 CFR 72.23	40 CFR 72.24(a)
40 CFR 72.25(a) & (b)	40 CFR 72.30(a), (c), (d) & (e)
40 CFR 72.31	40 CFR 72.32
40 CFR 72.33(a), (b), (c) & (d)	40 CFR 72.40
40 CFR 72.50	40 CFR 72.51
40 CFR 72(b)(2)	40 CFR 72.80
40 CFR 72.81	40 CFR 72.82
40 CFR 72.83	40 CFR 72.84
40 CFR 72.85	40 CFR 72.90
40 CFR Part 72, Appendices A, B & D	40 CFR 73.2(a)
40 CFR 73.12	40 CFR 73.13(a)
40 CFR 73.31(b)	40 CFR 73.33(c)
40 CFR 73.35	40 CFR 73.36(a)
40 CFR 73.37(a), (c) & (e)	40 CFR 73.50(b)
40 CFR 73.71, except (e)	40 CFR 75.2(a)
40 CFR 75.4(b)(2), (e) & (g)	40 CFR 75.5

Emissions Unit Information Section 2 of 4

**D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)**

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? Stack – EU2		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 100 feet	7. Exit Diameter: 11 feet	
8. Exit Temperature: 230 °F	9. Actual Volumetric Flow Rate: 298,651 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: 17 East (km): 418.7 North (km): 3083.0			
14. Emission Point Comment (limit to 200 characters):			

**E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)**

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Internal Combustion Engines; Electric Generation; Natural Gas Turbine		
2. Source Classification Code (SCC): 2-01-002-01		3. SCC Units: million cubic feet burned
4. Maximum Hourly Rate: 0.399	5. Maximum Annual Rate: 3,491	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 946
10. Segment Comment (limit to 200 characters): Maximum hourly and annual rates based on operation at 47°F and a lower heating value of natural gas based on 946 Btu/CF.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Internal Combustion Engines; Electric Generation; Biogas, Turbine		
2. Source Classification Code (SCC): 2-01-999-99		3. SCC Units: Million Cubic Feet Burned (All Gaseous Fuels)
4. Maximum Hourly Rate: 0.399	5. Maximum Annual Rate: 3,491	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: 0.1	8. Maximum % Ash:	9. Million Btu per SCC Unit: 946
10. Segment Comment (limit to 200 characters): The CT is capable of firing biogas when available. Maximum hourly and annual rates based on operation at 47°F and a lower heating value of natural gas based on 946 Btu/CF. Maximum sulfur content has been limited to 1 grain/100 cf.		

Emissions Unit Information Section 2 of 4

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: NO_x	2. Total Percent Efficiency of Control: 90%+
3. Potential Emissions: 22.1 lb/hour 97.0 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: See Comment Reference: BACT Determination	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): Annual NO_x = 22.1 lb/hr X 8,760 hr/yr / 2000lb/ton = 96.8 TPY (Set at 97.0 by PSD Permit)	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emissions based on allowables as specified in the PSD and Title V permits.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Rule	2. Future Effective Date of Allowable Emissions: N/A
3. Requested Allowable Emissions and Units: 15 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 22.1 lb/hour 97.0 tons/year
5. Method of Compliance (limit to 60 characters): Continuous Emissions Monitor System (CEMS) (EPA Method 20 if Requested by the Department)	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Allowable emissions based on the application of BACT as required by Rule 62-212, F.A.C. and as determined by the Department. Excess emissions allowed per condition III.C.2. of the Title V Operating Permit and Rule 62-210.700(1), F.A.C.	

Emissions Unit Information Section 2 of 4

Potential/Fugitive Emissions

1. Pollutant Emitted: CO	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 27.8 lb/hour 121.8 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: See Comment Reference: BACT Determination	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): Annual CO = 27.8 lb/hr X 8,760 hr/yr / 2000lb/ton = 121.8 TPY (PSD & Title V Limit – 127 TPY)	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emissions based on allowables as specified in the PSD and Title V permits.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Rule	2. Future Effective Date of Allowable Emissions: N/A
3. Requested Allowable Emissions and Units: 30 ppmvd @ 15% O₂	4. Equivalent Allowable Emissions: 27.8 lb/hour 121.8 tons/year
5. Method of Compliance (limit to 60 characters): EPA Method 10 (Requested Renewal Testing Only)	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Allowable emissions based on the application of BACT as required by Rule 62-212, F.A.C. and as determined by the Department. Excess emissions allowed per condition III.C.2. of the Title V Operating Permit and Rule 62-210.700(1), F.A.C.	

Emissions Unit Information Section 2 of 4

Potential/Fugitive Emissions

1. Pollutant Emitted: VOC		2. Total Percent Efficiency of Control: N/A	
3. Potential Emissions: 4 lb/hour		4. Synthetically Limited? <input checked="" type="checkbox"/> [X]	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: See Comment Reference: BACT Determination		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): Annual VOC = 4 lb/hr X 8,760 hr/yr / 2000lb/ton = 17.5 TPY (PSD & Title V Limit – 17.4 TPY)			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emissions based on allowables as specified in the PSD and Title V permits.			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Rule		2. Future Effective Date of Allowable Emissions: N/A	
3. Requested Allowable Emissions and Units: 10 ppmvd @ 15% O₂		4. Equivalent Allowable Emissions: 4 lb/hour 17.4 tons/year	
5. Method of Compliance (limit to 60 characters): EPA Methods 18 or 25A (Requested Renewal Testing Only)			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Allowable emissions based on the application of BACT as required by Rule 62-212, F.A.C. and as determined by the Department. Excess emissions allowed per condition III.C.2. of the Title V Operating Permit and Rule 62-210.700(1), F.A.C.			

Emissions Unit Information Section 2 of 4

Potential/Fugitive Emissions

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 5 lb/hour 21.9 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: See Comment Reference: PSD Permit	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): Annual PM = 5 lb/hr X 8,760 hr/yr / 2000lb/ton = 21.9 TPY	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emissions based on BACT as specified in the PSD and Title V permits. The reported rates reflect operation at 47 °F.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Rule	2. Future Effective Date of Allowable Emissions: N/A
3. Requested Allowable Emissions and Units: 5 pounds per hour	4. Equivalent Allowable Emissions: 5 lb/hour 21.9 tons/year
5. Method of Compliance (limit to 60 characters): EPA Method 5 or 17 (Requested Renewal testing Only)	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Allowable emissions based on the application of BACT as required by Rule 62-212, F.A.C. and as determined by the Department.	

Emissions Unit Information Section 2 of 4

Potential/Fugitive Emissions

1. Pollutant Emitted: PM10	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 5 lb/hour 21.9 tons/year	4. Synthetically Limited? <input type="checkbox"/>
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: See Comment Reference: PSD Permit	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): Annual PM10 = 5 lb/hr X 8,760 hr/yr / 2000lb/ton = 21.9 TPY	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emissions based on BACT as specified in the PSD and Title V permits. The reported rates reflect operation at 47 °F.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Rule	2. Future Effective Date of Allowable Emissions: N/A
3. Requested Allowable Emissions and Units: 5 pounds per hour	4. Equivalent Allowable Emissions: 5 lb/hour 21.9 tons/year
5. Method of Compliance (limit to 60 characters): EPA Method 5 or 17 (Requested Renewal testing Only)	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Allowable emissions based on the application of BACT as required by Rule 62-212, F.A.C. and as determined by the Department.	

Emissions Unit Information Section 2 of 4

Potential/Fugitive Emissions

1. Pollutant Emitted: SO₂	2. Total Percent Efficiency of Control: N/A
3. Potential Emissions: 1.1 lb/hour 4.9 tons/year	4. Synthetically Limited? [X]
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: See Comment Reference: PSD Permit	7. Emissions Method Code: 0
8. Calculation of Emissions (limit to 600 characters): $\text{SO}_2 \text{ (lb/hr)} = 377 \times 10^6 \text{ Btu/hr} / 946 \text{ Btu/CF} \times 1\text{gr}/100\text{CF} / 7,000 \text{ gr/lbm} \times 64/32$ $= 1.1 \text{ lb/hr}$ $\text{Annual SO}_2 = 1.1 \text{ lb/hr} \times 8,760 \text{ hr/yr} / 2000\text{lb/ton}$ $= 4.87 \text{ TPY}$	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Emissions based on sulfur content limitation specified in the PSD and Title V permits.	

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Other	2. Future Effective Date of Allowable Emissions: N/A
3. Requested Allowable Emissions and Units: Sulfur Content 1 gr/100 CF	4. Equivalent Allowable Emissions: 1.1 lb/hour 4.9 tons/year
5. Method of Compliance (limit to 60 characters): Custom Fuel Monitoring Schedule	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Allowable emissions based on the requested sulfur content limitation.	

Emissions Unit Information Section 2 of 4

H. VISIBLE EMISSIONS INFORMATION
(Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE10	2. Basis for Allowable Opacity: <input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: 10 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: Annual, EPA Method 9 <i>(Requested that the Annual VE Requirement be Removed)</i>	
5. Visible Emissions Comment (limit to 200 characters): Visible Emissions limited through the construction permits based on the Department's BACT Determination. Excess emissions allowed per condition III.C.3. of the Title V Operating Permit and Rule 62-210.700(1), F.A.C.	

Visible Emissions Limitation: Visible Emissions Limitation ____ of ____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: <input type="checkbox"/> Rule <input type="checkbox"/> Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

Emissions Unit Information Section 2 of 4

I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor of

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[] Rule [] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

Continuous Monitoring System: Continuous Monitor ___ of ___

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[X] Rule [] Other
4. Monitor Information: Manufacturer: Model Number:	Serial Number:
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

**J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)**

Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-EU002-001</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-EU001-002</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
4. Description of Stack Sampling Facilities <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-EU002-004</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously submitted, Date: April 2002 <input type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: <u>OC-EU002-006</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-FI-006</u> <input type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment:

Emissions Unit Information Section 2 of 4

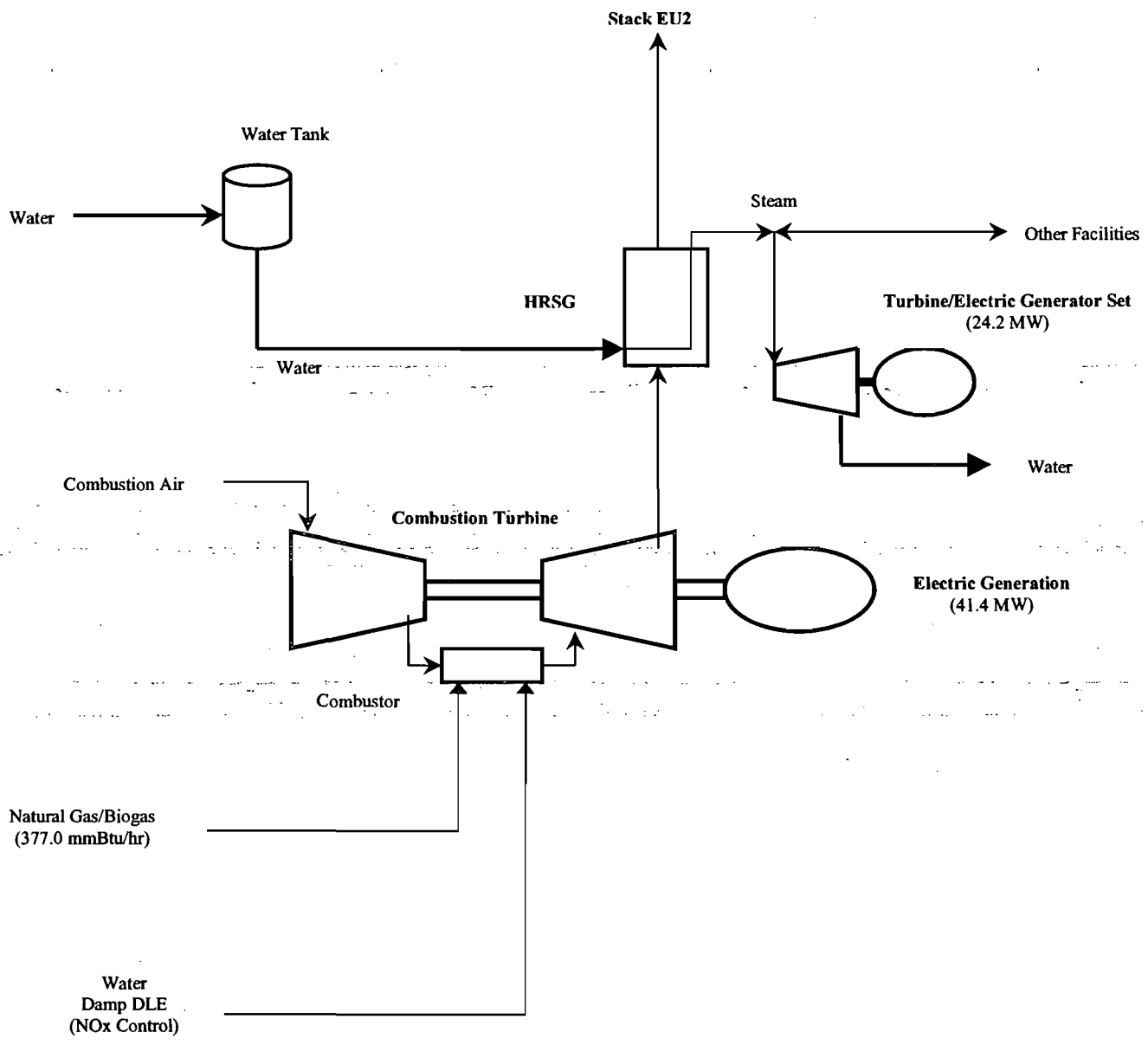
Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation [X] Attached, Document ID: <u>OC-EU002-011</u> [] Not Applicable
12. Alternative Modes of Operation (Emissions Trading) [] Attached, Document ID: _____ [X] Not Applicable
13. Identification of Additional Applicable Requirements [X] Attached, Document ID: <u>OC-FI-012</u> [] Not Applicable
14. Compliance Assurance Monitoring Plan [] Attached, Document ID: _____ [X] Not Applicable
15. Acid Rain Part Application (Hard-copy Required) [X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: <u>OC-EU001-015</u> [] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ [] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ [] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ [] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____ [] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____ [] Not Applicable

Emissions Unit Information Section 2 of 4

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Document ID OC-EU002-001
Process Flow Diagram

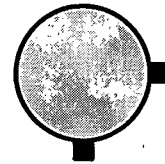
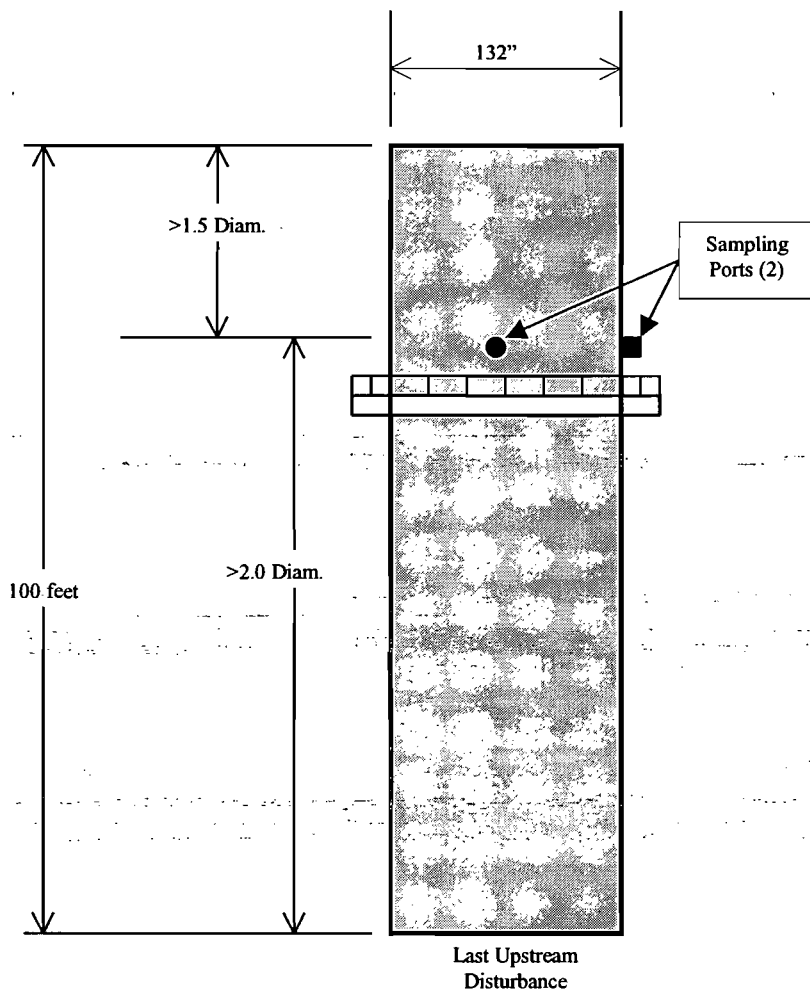


Orange Cogeneration, L.P.
Orange Cogeneration Facility
TITLE V OPERATING PERMIT RENEWAL

Source: 1996 Title V Permit Application, Attachment OR-E01-L1,
 Title V Operating Permit & AC/PSD Permits

Foster Wheeler Environmental Corporation		
Scale: N/A	Prepared: DJG	File: OC-EU002-001.doc
Date: 5/20/02	Approved:	Document ID: OC-EU002-001

Document ID OC-EU002-004
Stack Sampling Facilities



Traverse Point Number	Inches Inside Stack Wall
1	1.5
2	4.2
3	7.3
4	10.4
5	13.9
6	17.4
7	21.3
8	25.6
9	30.4
10	35.9
11	42.6
12	52.5
13	79.5
14	89.4
15	96.1
16	101.6
17	106.4
18	110.7
19	114.6
20	118.1
21	121.6
22	124.7
23	127.8
24	130.5

Orange Cogeneration, L.P.
Orange Cogeneration Facility

TITLE V OPERATING PERMIT RENEWAL



Foster Wheeler Environmental Corporation

Scale: N/A
Date: 5/20/02

Prepared: DJG
Approved:

File: OC-EU002-004.doc
Document ID: OC-EU002-004

Reference: February 2002 Stack Test Report, Air Consulting & Engineering, Inc.

Document ID OC-EU002-006
Startup/Shutdown Procedures

OC-EU002-006

PROCEDURES FOR START-UP AND SHUTDOWN

Start-up for the combustion turbine (CT) begins with “lighting off” of the machine on natural gas. A period of from two to several hours is required to allow metal temperatures in the heat recovery steam generator (HRSG) and in the steam turbine to equilibrate without undue metal stress, during this time the unit is placed “on the line” and begins sending electrical power to the grid at reduced loads to allow equipment to come up to pressures and temperatures.

NOx emissions are controlled by use of dry-low NOx combustors during start-up and shutdown and continuously monitored along with O₂ concentrations. If excess emissions occur during start-up or shutdown, the nature and cause of the event are identified and recorded. Corrective actions are taken when necessary to correct problems and preventative measures adopted to avoid future problems. At all times, including start-up and shutdown, Best Operating Practices are adhered to and all efforts to minimize both the level and duration of excess emissions are undertaken.

Shutdown is performed by reducing the unit load (Electrical Production) to a minimum level, opening the breaker, which disconnects the unit from the electrical grid, shutting off the fuel and coasting down to a stop.

Reference: 1996 Title V Permit Application, Attachment MB-E01-L6

Document ID OC-EU002-011
Alternative Methods of Operation

OC-EU002-011

ALTERNATIVE METHODS OF OPERATION

The alternative methods of operation include the following:

- ◆ Natural Gas firing
- ◆ Biogas Firing

The alternative methods of operation have all been addressed within the construction permits and the initial Title V Operating Permit.

EMISSIONS UNIT 003
AUXILIARY BOILER

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

**A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)**

Emissions Unit Description and Status

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):</p> <p style="text-align: center;">Auxiliary Boiler</p>			
<p>4. Emissions Unit Identification Number:</p> <p>ID: 003</p>		<p><input type="checkbox"/> No ID</p> <p><input type="checkbox"/> ID Unknown</p>	
<p>5. Emissions Unit Status Code:</p> <p style="text-align: center;">A</p>	<p>6. Initial Startup Date:</p> <p style="text-align: center;">6/16/1995</p>	<p>7. Emissions Unit Major Group SIC Code:</p> <p style="text-align: center;">49</p>	<p>8. Acid Rain Unit?</p> <p style="text-align: center;"><input checked="" type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p> <p>The unit provides steam on an as needed basis. It is authorized to fire any combination of natural gas and biogas. It is equipped with a low NOx burner to reduce NOx emissions.</p>			

Emissions Unit Information Section 3 of 4

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

Control Methods:

Natural Gas & Biogas Firing – Emissions control strategy includes the use of a Low NOx Burner for NOx emissions coupled with good combustion practices for VOC, CO, and PM/PM10 emissions, and Clean Pipeline Quality Natural Gas for SO₂ emissions. The control strategy ensures compliance with the BACT emission limitations.

2. Control Device or Method Code(s): **024**

Emissions Unit Details

1. Package Unit:		
Manufacturer:	Zurn Nepco	Model Number: 2 Drum Bent Tube Boiler
2. Generator Nameplate Rating:	MW	
3. Incinerator Information:		
	Dwell Temperature:	°F
	Dwell Time:	seconds
	Incinerator Afterburner Temperature:	°F

**B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)**

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	100	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):	The emissions unit is authorized to operate continuous.	

**C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)**

List of Applicable Regulations	
Rule 62-204.800(7)(b)39., F.A.C.	Rule 62-204.800(15), F.A.C
Rule 62-204.800(16), F.A.C.	Rule 62-204.800(17), F.A.C.
Rule 62-204.800(19), F.A.C.	Rule 62-210.700, F.A.C., except (2) & (3)
Rule 62-214, F.A.C.	Rule 62-297.310(1), (2), (3), F.A.C.
Rule 62-297.310(4)(a), (b) and (d), F.A.C.	Rule 62-297.310(5), (6), F.A.C.
Rule 62-297.310(7)(a)3., 4., 8. & 9. F.A.C.	Rule 62-297.310(7)(b) & (c), F.A.C.
Rule 62-297.310(8), F.A.C.	Rule 62-297.401(1), (2), (3), (4), (5) & (9), F.A.C.
Rule 62-297.401(10) & (20), F.A.C.	Rule 62-297.520(2) & (3), F.A.C.
40 CFR 60.40c(a)	40 CFR 60.41c
40 CFR Part 60 Appendix B	40 CFR Part 60 Appendix F
40 CFR 72.2	40 CFR 72.6(a)(3)(i) and/or (iv)
40 CFR 72.9(a), (b), (c)(1), (2), (3)(iv), (4), (5), (e)	40 CFR 72.9(f) & (g)
40 CFR 72.11	40 CFR 72.20((c)
40 CFR 72.21	40 CFR 72.22
40 CFR 72.23	40 CFR 72.24(a)
40 CFR 72.25(a) & (b)	40 CFR 72.30(a), (c), (d) & (e)
40 CFR 72.31	40 CFR 72.32
40 CFR 72.33(a), (b), (c) & (d)	40 CFR 72.40
40 CFR 72.50	40 CFR 72.51
40 CFR 72(b)(2)	40 CFR 72.80
40 CFR 72.81	40 CFR 72.82
40 CFR 72.83	40 CFR 72.84
40 CFR 72.85	40 CFR 72.90
40 CFR Part 72, Appendices A, B & D	40 CFR 73.2(a)
40 CFR 73.12	40 CFR 73.13(a)
40 CFR 73.31(b)	40 CFR 73.33(c)
40 CFR 73.35	40 CFR 73.36(a)
40 CFR 73.37(a), (c) & (e)	40 CFR 73.50(b)
40 CFR 73.71, except (e)	40 CFR 75.2(a)
40 CFR 75.4(b)(2), (e) & (g)	40 CFR 75.5
40 CFR 75.10	40 CFR 75.11(d)(2) & (e)(1)
40 CFR 75.12(b), (c) & (f)	40 CFR 75.13(a) & (b)

Emissions Unit Information Section 3 of 4

**D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)**

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? Stack – EU3		2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Single stack serving the Auxiliary Boiler			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:			
5. Discharge Type Code: V	6. Stack Height: 65 feet	7. Exit Diameter: 3.7 feet	
8. Exit Temperature: 305 °F	9. Actual Volumetric Flow Rate: 29,731 acfm	10. Water Vapor: %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: 17 East (km): 418.7 North (km): 3083.0			
14. Emission Point Comment (limit to 200 characters):			

Emissions Unit Information Section 3 of 4

**E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)**

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Internal Combustion Boiler; Industrial Natural Gas; 10-100 mmBtu/hr		
2. Source Classification Code (SCC): 1-02-006-02		3. SCC Units: Million Cubic Feet Burned
4. Maximum Hourly Rate: 0.097	5. Maximum Annual Rate: 851	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,029 (HHV)
10. Segment Comment (limit to 200 characters): Maximum heat input rate is limited by a federally-enforceable permit condition. Sulfur content limited to 1 grain per 100 cf of gas.		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Internal Combustion Boiler; Industrial Biogas; 10-100 mmBtu/hr		
2. Source Classification Code (SCC): 1-02-999-99		3. SCC Units: Million Cubic Feet Burned
4. Maximum Hourly Rate: 0.097	5. Maximum Annual Rate: 851	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1,029 (HHV)
10. Segment Comment (limit to 200 characters): Maximum heat input rate is limited by a federally-enforceable permit condition. Sulfur content limited to 1 grain per 100 cf of gas.		

**F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
NOx			EL
CO			EL
SO ₂			EL
VOC			EL
PM/PM10			EL
H104 Hexane			NS
H151 POM			NS
Total HAPs			NS

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: NO_x		2. Total Percent Efficiency of Control: 90%	
3. Potential Emissions: 13.0 lb/hour		56.9 tons/year	4. Synthetically Limited? <input type="checkbox"/>
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 0.13 lb/mmBtu Reference: PSD Permit		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): $\text{lb/hr} = 0.13 \text{ lb/mmBtu} \times 100 \text{ mmBtu/hr}$ $= 13.0 \text{ lb/hr}$ $\text{TPY} = 13.0 \text{ lb/hr} \times 8,760 \text{ hr/yr} / 2000 \text{ lb/ton}$ $= 56.9 \text{ TPY}$			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Rule - BACT		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 0.13 lb/mmBtu		4. Equivalent Allowable Emissions: 13.0 lb/hour 56.9 tons/year	
5. Method of Compliance (limit to 60 characters): Continuous Emissions Monitoring System (CEMS) <i>(EPA Reference Method 7E if Requested by the Department)</i>			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

Emissions Unit Information Section 3 of 4

Potential/Fugitive Emissions

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 10.0 lb/hour		43.8 tons/year	4. Synthetically Limited? <input type="checkbox"/>
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 0.10 lb/mmBtu Reference: PSD Permit		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): $\text{lb/hr} = 0.10 \text{ lb/mmBtu} \times 100 \text{ mmBtu/hr}$ $= 10.0 \text{ lb/hr}$ $\text{TPY} = 10.0 \text{ lb/hr} \times 8,760 \text{ hr/yr} / 2000 \text{ lb/ton}$ $= 43.8 \text{ TPY}$			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Rule - BACT		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 0.10 lb/mmBtu		10.0 lb/hour	43.8 tons/year
4. Equivalent Allowable Emissions:			
5. Method of Compliance (limit to 60 characters): EPA Reference Method 10, Renewal Testing Only			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

Emissions Unit Information Section 3 of 4

Potential/Fugitive Emissions

1. Pollutant Emitted: SO₂		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 0.3 lb/hour		4. Synthetically Limited? <input checked="" type="checkbox"/> [X]	
		1.3 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 0.003 lb/mmBtu Reference: PSD Permit		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): $\text{lb/hr} = 0.003 \text{ lb/mmBtu} \times 100 \text{ mmBtu/hr}$ $= 0.3 \text{ lb/hr}$ $\text{TPY} = 0.3 \text{ lb/hr} \times 8,760 \text{ hr/yr} / 2000 \text{ lb/ton}$ $= 1.3 \text{ TPY}$			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Sulfur content is limited to 1 grain per 100 cubic feet of natural gas or biogas fired.			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Rule - BACT		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 0.003 lb/mmBtu		4. Equivalent Allowable Emissions: 0.3 lb/hour 1.3 tons/year	
5. Method of Compliance (limit to 60 characters): Fuel analysis for sulfur content, Renewal Testing only.			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Per the permit, a fuel sulfur content of 1 grain per 100 cubic foot of gas fired or less is deemed compliant with the emission limitation			

Emissions Unit Information Section 3 of 4

Potential/Fugitive Emissions

1. Pollutant Emitted: VOC		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 4.3 lb/hour		4. Synthetically Limited? <input type="checkbox"/>	
		18.8 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 0.043 lb/mmBtu Reference: PSD Permit		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): $\text{lb/hr} = 0.043 \text{ lb/mmBtu} \times 100 \text{ mmBtu/hr}$ $= 4.3 \text{ lb/hr}$ $\text{TPY} = 4.3 \text{ lb/hr} \times 8,760 \text{ hr/yr} / 2000 \text{ lb/ton}$ $= 18.8 \text{ TPY}$			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Rule - BACT		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 0.043 lb/mmBtu		4. Equivalent Allowable Emissions: 4.3 lb/hour 18.8 tons/year	
5. Method of Compliance (limit to 60 characters): EPA Reference Method 18 or 25, Renewal Testing Only			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

Emissions Unit Information Section 3 of 4

Potential/Fugitive Emissions

1. Pollutant Emitted: PM		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 1.0 lb/hour		4. Synthetically Limited? <input type="checkbox"/>	
		4.4 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 0.01 lb/mmBtu Reference: PSD Permit		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): $\text{lb/hr} = 0.01 \text{ lb/mmBtu} \times 100 \text{ mmBtu/hr}$ $= 1.0 \text{ lb/hr}$ $\text{TPY} = 1.0 \text{ lb/hr} \times 8,760 \text{ hr/yr} / 2000 \text{ lb/ton}$ $= 4.4 \text{ TPY}$			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Rule - BACT		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 0.01 lb/mmBtu		4. Equivalent Allowable Emissions: 1.0 lb/hour 4.4 tons/year	
5. Method of Compliance (limit to 60 characters): EPA Reference Method 5 or 17, Renewal Testing Only			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

Emissions Unit Information Section 3 of 4

Potential/Fugitive Emissions

1. Pollutant Emitted: PM10		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 1.0 lb/hour		4. Synthetically Limited? <input type="checkbox"/>	
		4.4 tons/year	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: 0.01 lb/mmBtu Reference: PSD Permit		7. Emissions Method Code: 0	
8. Calculation of Emissions (limit to 600 characters): $\text{lb/hr} = 0.01 \text{ lb/mmBtu} \times 100 \text{ mmBtu/hr}$ $= 1.0 \text{ lb/hr}$ $\text{TPY} = 1.0 \text{ lb/hr} \times 8,760 \text{ hr/yr} / 2000 \text{ lb/ton}$ $= 4.4 \text{ TPY}$			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: Rule - BACT		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units: 0.01 lb/mmBtu		4. Equivalent Allowable Emissions: 1.0 lb/hour 4.4 tons/year	
5. Method of Compliance (limit to 60 characters): EPA Reference Method 5 or 17, Renewal Testing Only			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

Emissions Unit Information Section 3 of 4

**I. CONTINUOUS MONITOR INFORMATION
(Only Regulated Emissions Units Subject to Continuous Monitoring)**

Continuous Monitoring System: Continuous Monitor 1 of 2

1. Parameter Code: EM	2. Pollutant(s): NOx
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: Rosemount Model Number: 951C Serial Number: 1000147	
5. Installation Date: 15 April 1995	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

Continuous Monitoring System: Continuous Monitor 2 of 2

1. Parameter Code: EM	2. Pollutant(s): O2
3. CMS Requirement:	<input checked="" type="checkbox"/> Rule <input type="checkbox"/> Other
4. Monitor Information: Manufacturer: Sservomex Model Number: 1400B Serial Number: 01420/B403	
5. Installation Date: 15 April 1995	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

Emissions Unit Information Section 3 of 4

**J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)**

Supplemental Requirements

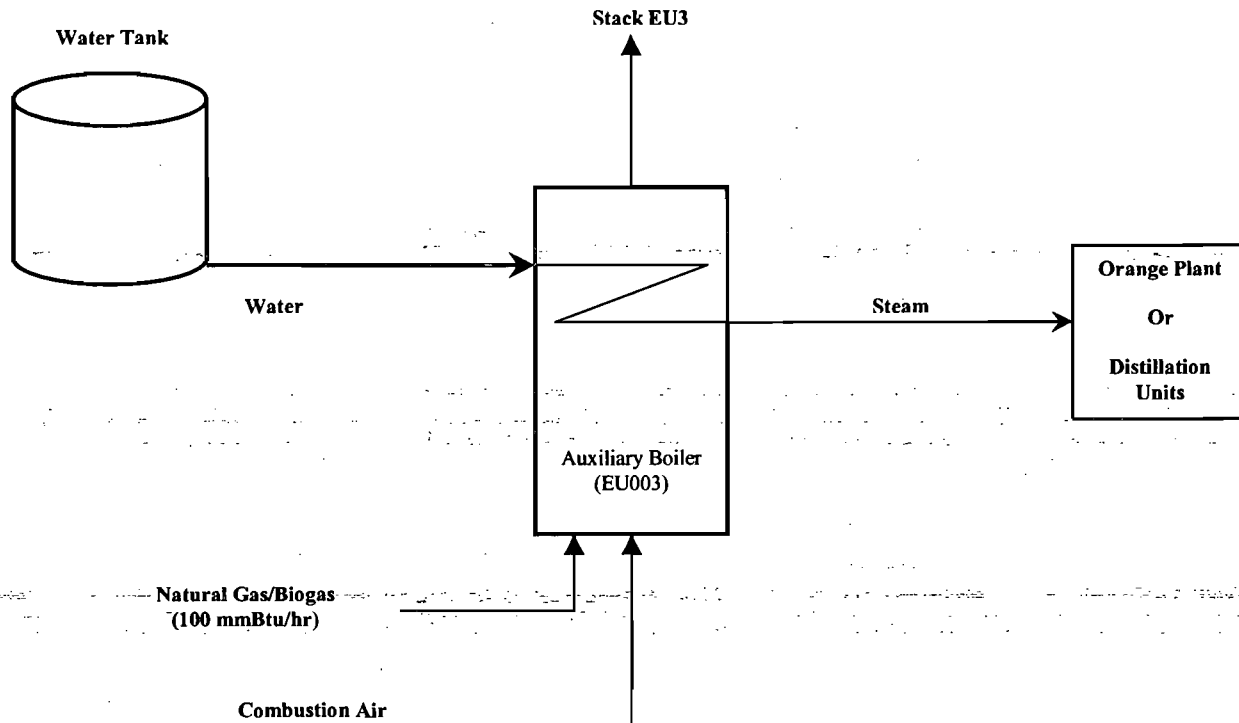
1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-EU003-001</u> [] Not Applicable [] Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-EU001-002</u> [] Not Applicable [] Waiver Requested
3. Detailed Description of Control Equipment [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested
4. Description of Stack Sampling Facilities <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-EU003-004</u> [] Not Applicable [] Waiver Requested
5. Compliance Test Report [] Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously submitted, Date: April 27, 2000 (Last Operated 3/1/2001) [] Not Applicable
6. Procedures for Startup and Shutdown <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-EU003-006</u> [] Not Applicable [] Waiver Requested
7. Operation and Maintenance Plan [] Attached, Document ID: _____ [X] Not Applicable [] Waiver Requested
8. Supplemental Information for Construction Permit Application <input checked="" type="checkbox"/> Attached, Document ID: <u>OC-FI-006</u> [] Not Applicable
9. Other Information Required by Rule or Statute [] Attached, Document ID: _____ [X] Not Applicable
10. Supplemental Requirements Comment:

Emissions Unit Information Section 3 of 4

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation [X] Attached, Document ID: <u>OC-EU003-011</u> [] Not Applicable
12. Alternative Modes of Operation (Emissions Trading) [] Attached, Document ID:_____ [X] Not Applicable
13. Identification of Additional Applicable Requirements [X] Attached, Document ID: <u>OC-FI-012</u> [] Not Applicable
14. Compliance Assurance Monitoring Plan [] Attached, Document ID:_____ [X] Not Applicable
15. Acid Rain Part Application (Hard-copy Required) - [X] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: <u>OC-EU001-015</u> [] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID:_____ [] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID:_____ [] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID:_____ [] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID:_____ [] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID:_____ [] Not Applicable

Document ID OC-EU003-001
Process Flow Diagram



**Orange Cogeneration L.P.
Orange Cogeneration Facility**

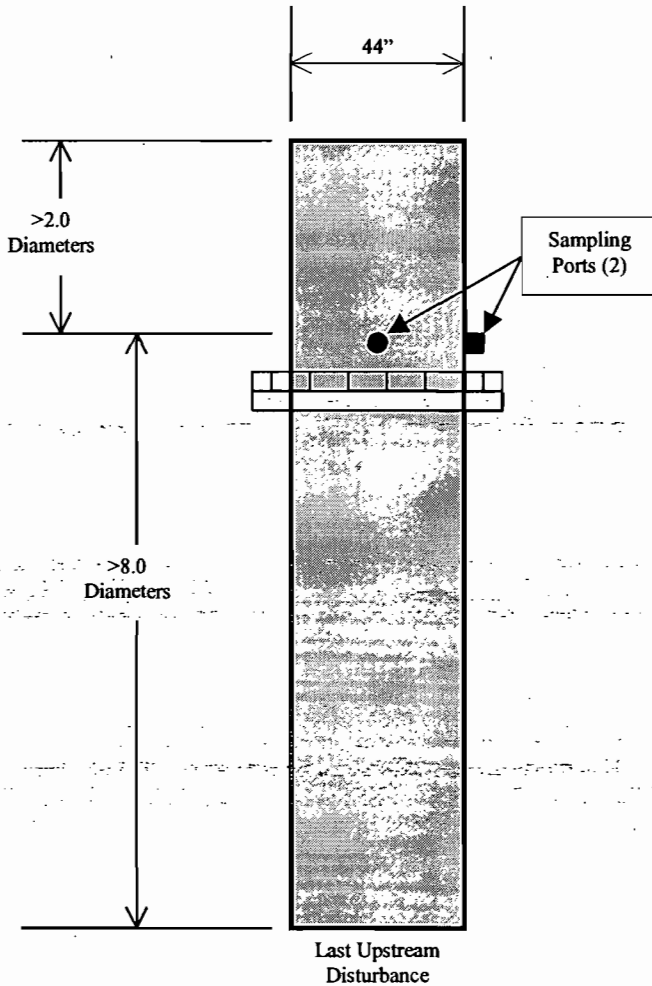
TITLE V OPERATING PERMIT RENEWAL

Foster Wheeler Environmental Corporation

Scale: N/A	Prepared: DJG	File: OC-EU003-001.doc
Date: 5/20/02	Approved:	Document ID: OC-EU003-001

Source: 1996 Title V Permit Application, Attachment OC-E03-L1,
Title V Operating Permit & AC/PSD Permits

Document ID OC-EU003-004
Stack Sampling Facilities



Traverse Point Number	Inches Inside Stack Wall
1	7.1
2	21.1
3	35.6

Reference:

Orange Cogeneration, L.P.
Orange Cogeneration Facility

TITLE V OPERATING PERMIT RENEWAL



Foster Wheeler Environmental Corporation

Scale: N/A
Date: 5/20/02

Prepared: DJG
Approved:

File: OC-EU003-004.doc
Document ID: OC-EU003-004

Document ID OC-EU003-006
Startup/Shutdown Procedures

OC-EU003-006

PROCEDURES FOR START-UP AND SHUTDOWN

Startup of the Auxiliary Boiler begins by introducing and igniting natural gas or biogas within the unit. Start-up is complete and steady-state operation begins when the combustion process has stabilized.

Shutdown begins when the steam load is decreased to below 10 percent of maximum and continues until the burner is removed from service.

Best Operating Practices to reduce or eliminate excess emissions include the following:

- ◆ Proper Excess Air Adjustments
- ◆ Shutdown of the Unit, if necessary.
- ◆ Reduction of Steam Load.

Knowledge of the Best Operating Practices to reduce or eliminate excess emissions is part of the training provided to the boiler operators.

Reference: 1996 Title V Permit Application, Attachment OC-E03-L6

Document ID OC-EU003-011
Alternative Methods of Operation

OC-EU003-011

ALTERNATIVE METHODS OF OPERATION

The alternative methods of operation include the following:

- ◆ Natural Gas firing
- ◆ Biogas Firing

The alternative methods of operation have all been addressed within the construction permits and the initial Title V Operating Permit.

EMISSIONS UNIT 004

UNREGULATED ACTIVITIES

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

**A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)**

Emissions Unit Description and Status

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.</p> <p><input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):</p> <p style="text-align: center;">Unregulated Activities</p>			
<p>4. Emissions Unit Identification Number: ID: EU004</p>		<p><input type="checkbox"/> No ID <input type="checkbox"/> ID Unknown</p>	
<p>5. Emissions Unit Status Code: A</p>	<p>6. Initial Startup Date: A</p>	<p>7. Emissions Unit Major Group SIC Code: 4911</p>	<p>8. Acid Rain Unit? <input type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p> <p>The unregulated activities include those emissions units or activities that are not specifically exempted from permitting or insignificant by Rule.</p>			

**E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)**

Segment Description and Rate: Segment 1 of 3

1. Segment Description (Process/Fuel Type) (limit to 500 characters): <p align="center">Surface Coating Activities</p>		
2. Source Classification Code (SCC): <p align="center">3-05-999-99</p>		3. SCC Units: <p align="center">Gallons</p>
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: 2,190
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): Based on the 6-gallon per day exemption criteria. Emissions associated with the surface coating activities will only be reported if the annual usage exceeds the permit exemption level. This is not expected to happen on an annual basis.		

Segment Description and Rate: Segment 2 of 3

<p align="center">Cooling Tower Drift Loses</p>		
2. Source Classification Code (SCC): <p align="center">3-85-001-01</p>		3. SCC Units: <p align="center">1,000 Gallons</p>
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): There are three (3) Cooling Tower Structures, the Primary Cooling Tower, the Secondary Cooling Tower, and the Evaporator.		

Emissions Unit Information Section 4 of 4

Segment Description and Rate: Segment 3 of 3

1. Segment Description (Process/Fuel Type) (limit to 500 characters): <p style="text-align: center;">Paved/Unpaved Areas</p>		
2. Source Classification Code (SCC):		3. SCC Units: grams per vehicle mile traveled
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: 1,000
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment of

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):		3. SCC Units:
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor: 85%
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

