Golder Associates Inc.

5100 West Lemon Street, Suite 114
Tampa, FL USA 33609
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Golder Associates

TITLE V RENEWAL APLICATION FOR TOM G. SMITH POWER PLANT & LAKE WORTH WATER TREATMENT PLANT LAKE WORTH, FL

Prepared for:
City of Lake Worth Utilities
117 South College Street
Lake Worth, Florida 33460

Prepared By:
Golder Associates Inc.
5100 West Lemon Street
Suite 114
Tampa, Florida 33609

June 2007

073-89508

DISTRIBUTION:
4 Copies – FDEP
2 Copies – City of Lake Worth Utilities
1 Copy -- Golder Associates, Inc.

Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: **City of Lake Worth Utilities**	
2. Site Name: **Tom G. Smith Power Plant and Lake Worth Water Treatment Plant**	
3. Facility Identification Number: **0990045**	
4. Facility Location... Street Address or Other Locator: **117 South College Street** City: **Lake Worth** County: **Palm Beach** Zip Code: **33460**	
5. Relocatable Facility? ☐ Yes **[X]** No	6. Existing Title V Permitted Facility? **[X]** Yes ☐ No

Application Contact

1. Application Contact Name: **Margaret Johnstone, Environmental Compliance Officer**
2. Application Contact Mailing Address... Organization/Firm: **City of Lake Worth Utilities** Street Address: **1900 2nd Avenue North** City: **Lake Worth** State: **FL** Zip Code: **33461**
3. Application Contact Telephone Numbers... Telephone: **(561) 586 - 1666** Fax: **(561) 586 - 1702**
4. Application Contact Email Address: **MJOHNSTONE@LAKEWORTH.ORG**

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	3. PSD Number (if applicable):
2. Project Number(s): 0990045-005-AV	4. Siting Number (if applicable):

APPLICATION INFORMATION

Purpose of Application

This application for air permit is submitted to obtain: (Check one)

Air Construction Permit

☐ Air construction permit.

☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).

☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

☐ Initial Title V air operation permit.

☒ Title V air operation permit revision.

☒ Title V air operation permit renewal.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.

☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)

☐ Air construction permit and Title V permit revision, incorporating the proposed project.

☐ Air construction permit and Title V permit renewal, incorporating the proposed project.

Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:

☐ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

This application is for a TV renewal and revision. The revisions reflect the permanent retirement of Units S-1 (EU007) and S-4 (EU010), and the addition of several insignificant units.

APPLICATION INFORMATION

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
001-005	MU-1 through MU-5; five 2,000-kW Diesel Generators		
006	GT-1; Gas Turbine #1		
009	S-3; Fossil Fuel Steam Generating Unit #3		
011	CC1 (GT-2/S-5); Combined Cycle Combustion Turbine 2/ Steam Unit 5		
012	T-10, T-11, and T-12 Fuel Oil Storage Tanks		
013	T-3, T-4, T-5, T-6, and T-8 Fuel Oil Storage Tanks; 5,000- and 950-gallon Lube Oil Storage Tanks and Fuel Oil Fittings and Pumps		

Application Processing Fee

Check one: ☐ Attached - Amount: $_____ ☐ Not Applicable

APPLICATION INFORMATION

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name :

2. Owner/Authorized Representative Mailing Address...
   Organization/Firm:
   Street Address:
   City: State: Zip Code:

3. Owner/Authorized Representative Telephone Numbers...
   Telephone: () - ext. Fax: () -

4. Owner/Authorized Representative Email Address:

5. Owner/Authorized Representative Statement:

I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. 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 and all other requirements identified in this application to which the facility is subject. 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 the facility or any permitted emissions unit.

Signature Date

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1. Application Responsible Official Name:
   David L. Mulvay, Power Plant Manager

2. Application Responsible Official Qualification (Check one or more of the following options, as applicable):
   - ☐ 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.
   - ☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively.
   - ☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.
   - ☒ The designated representative at an Acid Rain source.

3. Application Responsible Official Mailing Address...
   Organization/Firm: **City of Lake Worth Utilities**
   Street Address: **1900 2nd Avenue North**
   City: **Lake Worth** State: **FL** Zip Code: **33461**

4. Application Responsible Official Telephone Numbers...
   Telephone: **(561) 533-7351** ext. Fax: **(561) 586-1702**

5. Application Responsible Official Email Address: **DMULVAY@LAKEWORTH.ORG**

6. Application Responsible Official Certification:

   I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. 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 and all other applicable requirements identified in this application to which the Title V source is subject. 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 the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

David L. Mulvay — Signature

6-29-07 — Date

Department of Environmental Protection

Division of Air Resource Management

RESPONSIBLE OFFICIAL NOTIFICATION FORM

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: City of Lake Worth	
2. Site Name: Tom G. Smith Power Plant and Lake Worth Water Treatment Plant	3. County: Palm Beach
4. Title V Air Operation Permit/Project No. *(leave blank for initial Title V applications)*: 0990045-AV	

Notification Type *(Check one or more)*

- ☐ **INITIAL:** Notification of responsible officials for an initial Title V application.
- ☐ **RENEWAL:** Notification of responsible officials for a renewal Title V application.
- **X** **CHANGE:** Notification of change in responsible official(s).
  Effective date of change in responsible official(s) February 21, 2007

Primary Responsible Official

1. Name and Position Title of Responsible Official: David L. Mulvay, Power Plant Manager
2. Responsible Official Mailing Address:
   Organization/Firm: Lake Worth Utilities
   Street Address: 1900 2nd Avenue North
   City: Lake Worth State: FL Zip Code: 33461
3. Responsible Official Telephone Numbers:
   Telephone: (561) 533 - 7351 Fax: (561) 586 - 1702
4. Responsible Official Qualification *(Check one or more of the following options, as applicable)*:

[ ] 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.

[ ] For a partnership or sole proprietorship, a general partner or the proprietor, respectively.

[X] For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official.

[X] The designated representative at an Acid Rain source.

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.

David L. Mulvay — Signature

2-22-07 — Date

DEP Form No. 62-213.900(8)

CITY OF LAKE WORTH

1900 2ND AVENUE NORTH
LAKE WORTH, FLORIDA 33461
www.lakeworth.org

UTILITIES
DEPARTMENT

(561) 586-1666
FAX (561) 586-1702

February 23, 2007

Mr. Scott Sheplak, P.E.
Florida Department of Environmental Protection
Twin Towers Office Bldg. Mail Station 5500
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Title V Responsible Official Notification Form
City of Lake Worth Utilities
Tom G. Smith Power Plant Facility #0990045

Dear Mr. Sheplak:

Please be advised that the City Commission has authorized Mr. David L. Mulvay, Power Plant Manager to be the Responsible Official and Authorized Representative for our Title V Permit. Mr. Mulvay is the Alternate Designated Representative (ADR) under the Acid Rain Program. An updated DEP Responsible Official form reflecting this change is attached.

If you have any questions, please contact me at 561-533-7384 or email mjohnstone@lakeworth.org.

Sincerely,
CITY OF LAKE WORTH UTILITIES

Margaret Johnstone

Margaret Johnstone
Environmental Compliance Officer

cc: Mr. Ajaya Satyal, Environmental Manager Palm Beach County Health Dept.
Mr. Darrel Graziani, P.E., DEP SE District
Dave Mulvay, Power Plant Manager
Mike Ridge, Environmental/Performance Specialist

APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: **Scott Osbourn, Senior Consultant**
   Registration Number: **57557**

2. Professional Engineer Mailing Address...
   Organization/Firm: **Golder Associates, Inc.***
   Street Address: **5100 Lemon Street, Suite 114**
   City: **Tampa** State: **FL** Zip Code: **33609**

3. Professional Engineer Telephone Numbers...
   Telephone: **(813) 287 - 1717** ext. **211** Fax: **(813) 287 – 1716**

4. Professional Engineer Email Address: **sosbourn@golder.com**

5. 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.

(3) If the purpose of this application is to obtain a Title V 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 plan and schedule is submitted with this application.*

(4) If the purpose of this application is to obtain an air construction permit (check here [ ] *, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here* [ ] *, 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.*

(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal 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.*

Signature Date 6/29/07

(seal)

SCOTT OSBOURN LICENSE NO. 57557 STATE OF FLORIDA PROFESSIONAL ENGINEER

*** Board of Professional Engineers Certificate of Authorization No. 000016**

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone: **17** East (km): **592.8** North (km): **2943.7**		2. Facility Latitude/Longitude... Latitude (DD/MM/SS): **26/ 36/ 45** Longitude (DD/MM/SS): **80/ 04/ 04**	
3. Governmental Facility Code: **4**	4. Facility Status Code: **A**	5. Facility Major Group SIC Code: **49**	6. Facility SIC(s): **4911**
7. Facility Comment :			

Facility Contact

1. Facility Contact Name: **Margaret Johnstone, Environmental Compliance Officer**
2. Facility Contact Mailing Address... Organization/Firm: **City of Lake Worth Utilities** Street Address: **1900 2nd Avenue North** City: **Lake Worth** State: **FL** Zip Code: **33461**
3. Facility Contact Telephone Numbers: Telephone: **(561) 586 - 1666** Fax: **(561) 586 - 1702**
4. Facility Contact Email Address: **MJOHNSTONE@LAKEWORTH.ORG**

Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I. that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name:
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
4. Facility Primary Responsible Official Email Address:

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1. ☐ Small Business Stationary Source	☐ Unknown
2. ☐ Synthetic Non-Title V Source	
3. ☒ Title V Source	
4. ☒ Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. ☐ Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. ☐ Major Source of Hazardous Air Pollutants (HAPs)	
7. ☐ Synthetic Minor Source of HAPs	
8. ☒ One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. ☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. ☐ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. ☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))	
12. Facility Regulatory Classifications Comment: **Item 8 – Fuel Oil Storage Tanks (EU012) subject to NSPS, Subpart Kb.**	

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
SO_2	A	
NO_x	A	
PM	A	
CO	A	
VOC	B	
PM_{10}	A	

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap

7. Facility-Wide or Multi-Unit Emissions Cap Comment:

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **LW-FI-C1** ☐ Previously Submitted, Date:_____
2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **See EU Sections** ☐ Previously Submitted, Date:_____
3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **LW-FI-C3** ☐ Previously Submitted, Date:_____

Additional Requirements for Air Construction Permit Applications

1. Area Map Showing Facility Location:
   ☐ Attached, Document ID: _____ ☐ Not Applicable (existing permitted facility)
2. Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL):
   ☐ Attached, Document ID:_____
3. Rule Applicability Analysis:
   ☐ Attached, Document ID:_____
4. List of Exempt Emissions Units (Rule 62-210.300(3), F.A.C.):
   ☐ Attached, Document ID:_____ ☐ Not Applicable (no exempt units at facility)
5. Fugitive Emissions Identification:
   ☐ Attached, Document ID:_____ ☐ Not Applicable
6. Air Quality Analysis (Rule 62-212.400(7), F.A.C.):
   ☐ Attached, Document ID:_____ ☐ Not Applicable
7. Source Impact Analysis (Rule 62-212.400(5), F.A.C.):
   ☐ Attached, Document ID:_____ ☐ Not Applicable
8. Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.):
   ☐ Attached, Document ID:_____ ☐ Not Applicable
9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.):
   ☐ Attached, Document ID:_____ ☐ Not Applicable
10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.):
    ☐ Attached, Document ID:_____ ☐ Not Applicable

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):
   ☐ Attached, Document ID:_____ ☐ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities (Required for initial/renewal applications only):
   ☒ Attached, Document ID: **LW-FI-CV1** ☐ Not Applicable (revision application)

2. Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought):
   ☒ Attached, Document ID: **LW-FI-CV2**
   ☐ Not Applicable (revision application with no change in applicable requirements)

3. Compliance Report and Plan (Required for all initial/revision/renewal applications):
   ☒ Attached, Document ID: **LW-FI-CV3**
   Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.

4. List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only):
   ☐ Attached, Document ID:_____
   ☐ Equipment/Activities On site but Not Required to be Individually Listed
   ☒ Not Applicable

5. Verification of Risk Management Plan Submission to EPA (If applicable, required for initial/renewal applications only) :
   ☒ Attached, Document ID: **LW-FI-CV5** ☐ Not Applicable

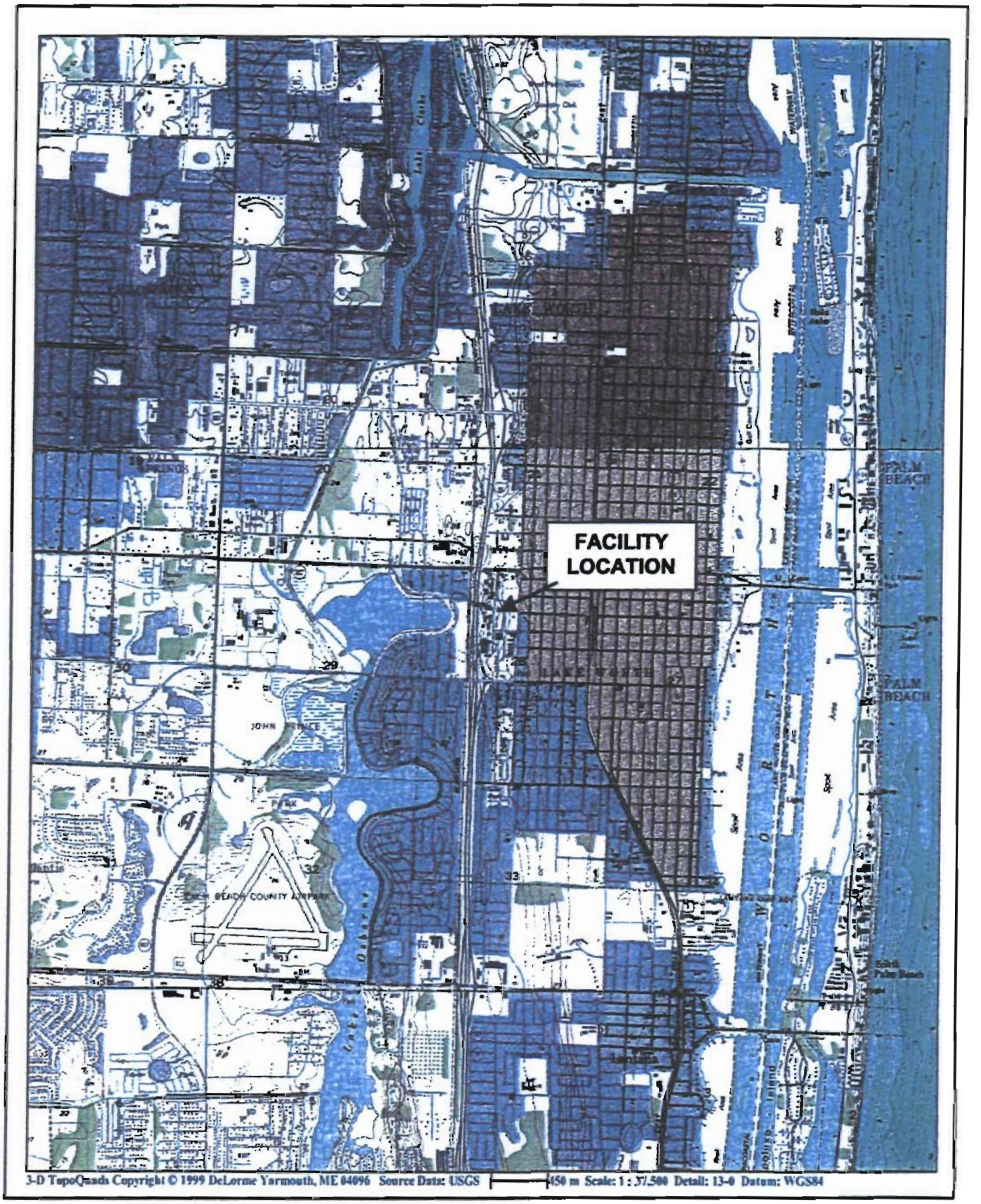
6. Requested Changes to Current Title V Air Operation Permit:
   ☒ Attached, Document ID: **LW-FI-CV6** ☐ Not Applicable

Additional Requirements Comment

Item 5 above is no longer applicable.

FACILITY ATTACHMENTS

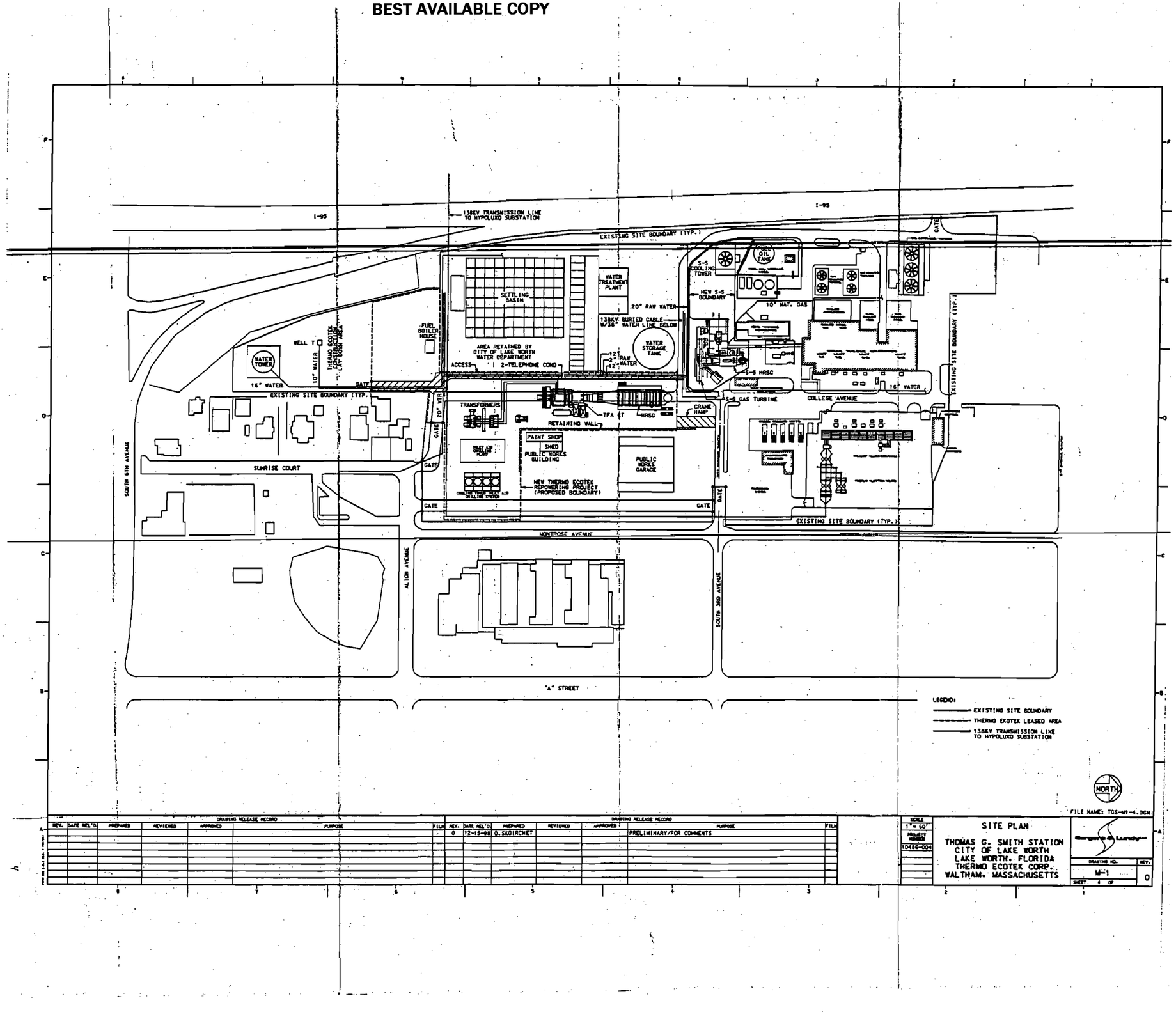
Attachment LW-FI-C1
Area Map and Facility Plot Plan



Attachment LW-FI-C1. Area Map
Lake Worth Utilities, City of Lake Worth, Florida

Source: Golder, 2002.

Golder Associates



FILE NAME: TGS-M1-4.DGN

DRAWING RELEASE RECORD							
REV.	DATE REL'D.	PREPARED	REVIEWED	APPROVED	PURPOSE	FILE
0	12-15-98	O. SKOIRCHET			PRELIMINARY/FOR COMMENTS	

SCALE	1" = 60'
PROJECT NUMBER	10486-004

SITE PLAN

THOMAS G. SMITH STATION
CITY OF LAKE WORTH
LAKE WORTH, FLORIDA
THERMO ECOTEK CORP.
WALTHAM, MASSACHUSETTS

Stone & Webster Engineering

DRAWING NO.	REV.
M-1	0

SHEET 4 OF

Attachment LW-FI-C3
Precautions to Prevent Emissions of Unconfined Particulate Matter

ATTACHMENT LW-FI-C3

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

The facility has negligible amounts of unconfined particulate matter as a result of the operation of the facility. Sources of particulate matter include:

- Fugitive dust from paved and unpaved roads, and
- Fugitive particulates from the use of bagged chemical products.

Operational measures are undertaken at the facility which also minimize particulate emissions, in accordance with 62-296.320(4)(c)2, F.A.C.:

- Maintenance of paved areas,
- Regular mowing of grass and care of vegetation, and
- Limiting access to plant property by unnecessary vehicles.

Attachment LW-FI-CV1
List of Insignificant Activities

Appendix I-1, List of Insignificant Emissions Units and/or Activities

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)l., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)l., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)l., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities
1. Dust collector hopper discharge valve for Unit S-3.
2. Liquid propane gas emergency generator.
3. Portable electrical generators that can be moved by hand from one location to another.
4. Air compressors and pneumatically operated equipment, including hand tools.
5. Storage tanks, vessels, and containers that hold or store liquid substances that will not have the potential to emit VOC or HAPS greater than the de minimis quantities.
6. Janitorial services and consumer use of janitorial products.
7.Diesel-fired generator
8.Diesel tank (6,000 gallons)
9.Mechanical draft cooling towers (2)

Attachment LW-FI-CV2
Identification of Applicable Requirements

ATTACHMENT LW-FI-CV2
TITLE V CORE LIST

Effective: 03/01/02

(Updated based on current version of FDEP Air Rules)

[**Note:** The Title V Core List is meant to simplify the completion of the "List of Applicable Regulations" for DEP Form No. 62-210.900(1), Application for Air Permit - Long Form. The Title V Core List is a list of rules to which all Title V Sources are presumptively subject. The Title V Core List may be referenced in its entirety, or with specific exceptions. The Department may periodically update the Title V Core List.]

Federal: ***(description)***

40 CFR 61, Subpart M: NESHAP for Asbestos.
40 CFR 82: Protection of Stratospheric Ozone.
40 CFR 82, Subpart B: Servicing of Motor Vehicle Air Conditioners (MVAC).
40 CFR 82, Subpart F: Recycling and Emissions Reduction.

State: ***(description)***

CHAPTER 62-4, F.A.C.: PERMITS, effective 02-07-06

62-4.030, F.A.C.: General Prohibition.
62-4.040, F.A.C.: Exemptions.
62-4.050, F.A.C.: Procedure to Obtain Permits; Application.
62-4.060, F.A.C.: Consultation.
62-4.070, F.A.C.: Standards for Issuing or Denying Permits; Issuance; Denial.
62-4.080, F.A.C.: Modification of Permit Conditions.
62-4.090, F.A.C.: Renewals.
62-4.100, F.A.C.: Suspension and Revocation.
62-4.110, F.A.C.: Financial Responsibility.
62-4.120, F.A.C.: Transfer of Permits.
62-4.130, F.A.C.: Plant Operation - Problems.
62-4.150, F.A.C.: Review.
62-4.160, F.A.C.: Permit Conditions.
62-4.210, F.A.C.: Construction Permits.
62-4.220, F.A.C.: Operation Permit for New Sources.

CHAPTER 62-210, F.A.C.: STATIONARY SOURCES - GENERAL REQUIREMENTS, effective 05-09-07

62-210.300, F.A.C.: Permits Required.
62-210.300(1), F.A.C.: Air Construction Permits.
62-210.300(2), F.A.C.: Air Operation Permits.
62-210.300(3), F.A.C.: Exemptions.
62-210.300(5), F.A.C.: Notification of Startup.
62-210.300(6), F.A.C.: Emissions Unit Reclassification.
62-210.300(7), F.A.C.: Transfer of Air Permits.

62-210.350, F.A.C.: Public Notice and Comment.
62-210.350(1), F.A.C.: Public Notice of Proposed Agency Action.
62-210.350(2), F.A.C.: Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.
62-210.350(3), F.A.C.: Additional Public Notice Requirements for Sources Subject to Operation Permits for Title V Sources.

62-210.360, F.A.C.: Administrative Permit Corrections.
62-210.370(3), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility.
62-210.400, F.A.C.: Emission Estimates.
62-210.650, F.A.C.: Circumvention.
62-210.700, F.A.C.: Excess Emissions.

62-210.900, F.A.C.: Forms and Instructions.
62-210.900(1), F.A.C.: Application for Air Permit – Title V Source, Form and Instructions.
62-210.900(5), F.A.C.: Annual Operating Report for Air Pollutant Emitting Facility, Form and Instructions.
62-210.900(7), F.A.C.: Application for Transfer of Air Permit – Title V and Non-Title V Source.

CHAPTER 62-212, F.A.C.: STATIONARY SOURCES - PRECONSTRUCTION REVIEW, effective 02-02-06

CHAPTER 62-213, F.A.C.: OPERATION PERMITS FOR MAJOR SOURCES OF AIR POLLUTION, effective 04-14-03

62-213.205, F.A.C.: Annual Emissions Fee.
62-213.400, F.A.C.: Permits and Permit Revisions Required.
62-213.410, F.A.C.: Changes Without Permit Revision.
62-213.412, F.A.C.: Immediate Implementation Pending Revision Process.
62-213.415, F.A.C.: Trading of Emissions Within a Source.
62-213.420, F.A.C.: Permit Applications.
62-213.430, F.A.C.: Permit Issuance, Renewal, and Revision.
62-213.440, F.A.C.: Permit Content.
62-213.450, F.A.C.: Permit Review by EPA and Affected States
62-213.460, F.A.C.: Permit Shield.

62-213.900, F.A.C.: Forms and Instructions.
62-213.900(1), F.A.C.: Major Air Pollution Source Annual Emissions Fee Form.
62-213.900(7), F.A.C.: Statement of Compliance Form.

ATTACHMENT LW-FI-CV2
TITLE V CORE LIST

Effective: 03/01/02

(Updated based on current version of FDEP Air Rules)

CHAPTER 62-296, F.A.C.: STATIONARY SOURCES - EMISSION STANDARDS, effective 05-09-07

62-296.320(4)(c), F.A.C.: Unconfined Emissions of Particulate Matter.

62-296.320(2), F.A.C.: Objectionable Odor Prohibited.

CHAPTER 62-297, F.A.C.: STATIONARY SOURCES - EMISSIONS MONITORING, effective 2-12-04

62-297.310, F.A.C.: General Test Requirements.
62-297.310(4), F.A.C.: Applicable Test Procedures.
62-297.310(7), F.A.C.: Frequency of Compliance Tests.
62-297.310(6), F.A.C.: Repaired Stack Sampling Facilities.
62-297.310(5), F.A.C.: Determination of Process Variables.
62-297.510(8), F.A.C.: Test Report.
62-297.620, F.A.C.: Exceptions and Approval of Alternate Procedures and Requirements.

Miscellaneous:

CHAPTER 28-106, F.A.C.: Decisions Determining Substantial Interests
CHAPTER 62-110, F.A.C.: Exception to the Uniform Rules of Procedure, effective 07-01-98
CHAPTER 62-256, F.A.C.: Open Burning and Frost Protection Fires, effective 11-30-94
CHAPTER 62-257, F.A.C.: Asbestos Notification and Fee, effective 02-09-99
CHAPTER 62-281, F.A.C.: Motor Vehicle Air Conditioning Refrigerant Recovery and Recycling, effective 09-10-96

Attachment LW-FI-CV3
Compliance Report and Plan

ATTACHMENT LW-FI-CV3

COMPLIANCE CERTIFICATION

Compliance with the conditions set forth in this operation permit will be certified on an annual basis by the submittal of the Statement of Compliance – Title V Source DEP Form No. 62-213.900(7). The facility and emission units identified in this application are in compliance with the Applicable Regulations identified in the application form and attachments referenced in the section. The compliance report for this facility will be submitted by March 1 of each year for the prior calendar year. The compliance statement is as follows:

> 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.

David L. Mulvay
Signature, Responsible Official

6-29-07
Date

David L. Mulvay, Power Plant Manager

Attachment LW-FI-CV5
Risk Management Plan Verification Letter

CITY OF **LAKE WORTH**
1900 2ND AVENUE NORTH
LAKE WORTH, FLORIDA 33461
www.lakeworth.org

UTILITIES
DEPARTMENT

(561) 586-1666
FAX (561) 586-1702

April 26, 2006

Risk Management Plan (RMP) Reporting Center
P.O. Box 1515
Lanham-Seabrook, MD 20703-1515

Attention: RMP De-Registration

RE: De Registration of EPA Facility ID# 100000095853

Lake Worth Water Treatment Plant
301 College Street
Lake Worth, FL 33460

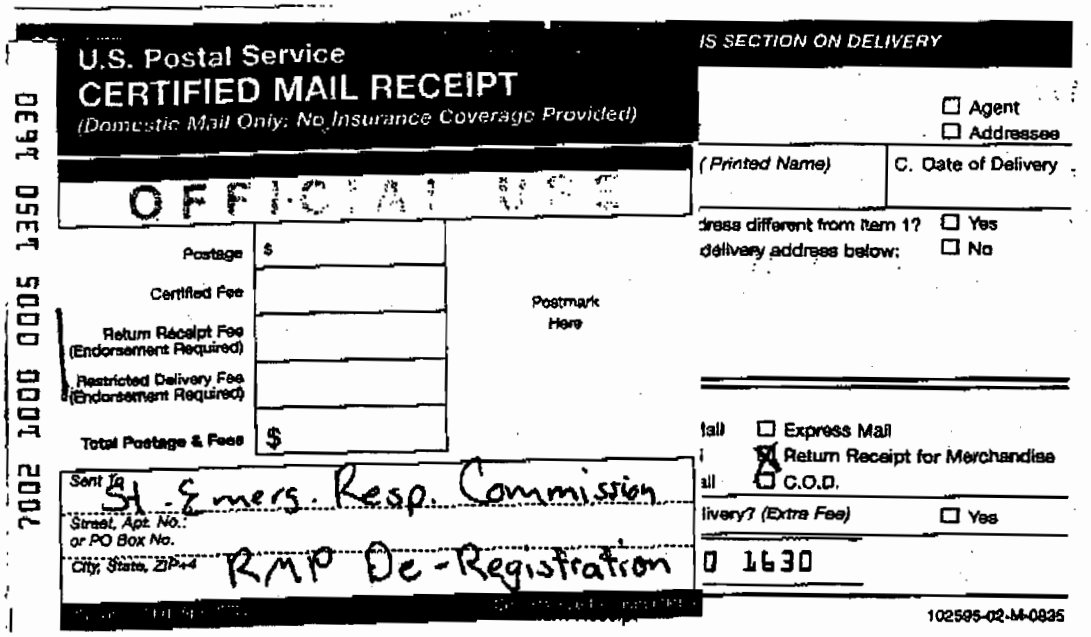
All Chlorine Gas was discontinued and removed from the above facility on April 12, 2006.

I certify that the above stationary source as of the above effective date is no longer covered by the Risk Management Plan, 40 CFR Part 68.

Robert J Douglas Water Plant Supervisor 4-26-06
Signature Title Date

cc: State Emergency Response Commission
Risk Management Plan Unit
Department of Community Affairs
2555 Shumard Oak Blvd.
Tallahassee, FL 32399-2100

Lake Worth Fire Department
Palm Beach County Fire Department



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☐ Addressee

(Printed Name) C. Date of Delivery

dress different from item 1? ☐ Yes
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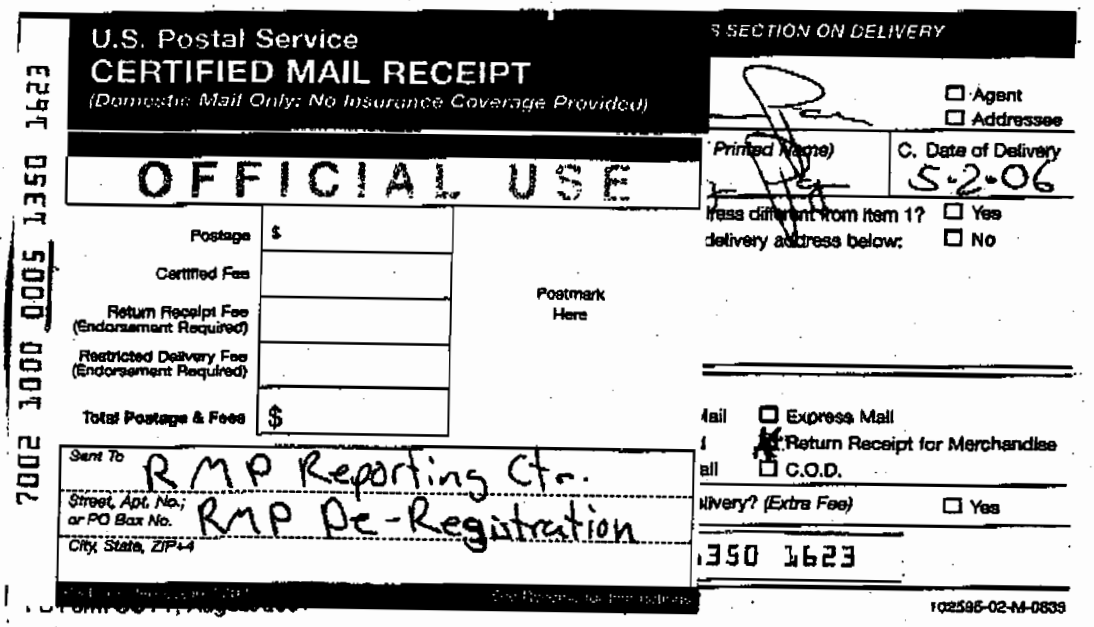
☒ Return Receipt for Merchandise
ail ☐ C.O.D.
livery? (Extra Fee) ☐ Yes

0 1630

102595-02-M-0835



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Street, Apt. No.; or PO Box No.: RMP De-Registration
City, State, ZIP+4:

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S SECTION ON DELIVERY

☐ Agent
☐ Addressee

Printed Name) C. Date of Delivery: 5-2-06

ress different from item 1? ☐ Yes
delivery address below: ☐ No

tail ☐ Express Mail
☒ Return Receipt for Merchandise
ail ☐ C.O.D.
livery? (Extra Fee) ☐ Yes

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(see back of page)

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CITY OF LAKE WORTH
UTILITIES DEPARTMENT
1900 2ND AVENUE NORTH
LAKE WORTH, FL 33461-4298

Attn: Margaret

COSS

UNITED STATES POSTAL SERVICE

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Postage & Fees Paid
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City of Lake Worth
Utilities Administration
1900 2nd Avenue North
Lake Worth, Florida 33461

Attn: Margaret

Attachment LW-FI-CV6
Requested Changes to Current Title V Air Operation Permit

CITY OF LAKE WORTH
1900 2ND AVENUE NORTH
LAKE WORTH, FLORIDA 33461
www.lakeworth.org

UTILITIES
DEPARTMENT

(561) 586-1666
FAX (561) 586-1702

August 18, 2005

Mr. Ajaya Satyal, Environmental Manager
Air Pollution Control Section
Division of Environmental Health and Engineering
P.O. Box 29
901 Evernia Street
West Palm Beach, FL 33401

Subject: Tom G. Smith Power Plant
Emission Unit Retirement
Facility ID Number 0990045

Dear Mr. Satyal,

This letter is to notify you that Emissions Units EU001 (S-1) and EU004 (S-4) at the Tom G. Smith Power Plant are now non-functional and considered officially retired. At the time of our next Title V Permit renewal, these emissions units will be removed from the permit.

If you have any questions, please call me at 561-586-1666 or Dave Mulvay, Power Plant Manager at 561-533-7351.

Sincerely,
CITY OF LAKE WORTH UTILITIES

George Adair, P.E.
Assistant City Manager/Utilities Director (DR)

cc: Darrel Graziani, Administrator Air Section, DEP, SE District
Dave Mulvay, Power Plant Manager
Margaret Johnstone, Environmental Compliance Officer
Mike Ridge, Power Plant Instrumentation/Environmental Specialist
Steve McElhaney, FMPA

Section I. Facility Information.

Subsection A. Facility Description.

This facility is an electric power generating plant and an adjacent potable water treatment facility and consists of: Five 2000 kW diesel engine generators; Fossil Fuel Steam Generating Units 1 ~~(S-1)~~, 3 (S-3) and 4 ~~(S-4)~~; Gas Turbine # 1, (GT-I); and a Combined Cycle Unit, (GT-21s-5).

Also included in this permit are miscellaneous unregulated insignificant emissions units and/or activities. No activities at the water treatment plant were required to be included in this permit as emissions units. Based on the Title V permit renewal application received July 5, 2002, this facility is not a major source of hazardous air pollutants (HAPS).

E.U. ID No.	
001 to 005	Five 2000 kW diesel engine generators, an MP 36 Power Pack; each diesel generator is a model 567~4 manufactured by GM Electro Motive Division.
~~007~~	~~Fossil Fuel Steam Generating Unit 1 (S-1), nominally rated at 7.5 MW, 11 I-mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil, with emissions exhausted through a 60 ft. stack~~
009	Fossil Fuel Steam Generating Unit 3 (S-3), nominally rated at 26.5 MW, 325.1 . mmBtu/hr. capable of burning any combination of natural pas and number 6 fuel , . - - - oil, with emissions exhausted through a 113 ft. stack
~~010~~	~~Fossil Fuel Steam Generating Unit 4, (S-4), nominally rated at 33 MW, 419.1 mmBtu/hr, ca-able of burning any combination of natural gas and number 6 fuel oil, with emissions exhausted through a 115 ft. stack~~
006	Gas Turbine # I. IGT- 1) nominally rated at 30 MW. 435 mmBtu/hr. capable of burning number 2 fuel oil. with emissions exhausted through a 46 ft. stack
01 I	Combined Cycle Unit (GT-2/S-5). nominally rated at 29.5 MW, consists of a gas turbine (GT-2) nominally rated at 20 MW and a heat recovery steam generator (S5) nominally rated at 10 MW. GT-2 has a maximum heat input of 317.6 mmBtu/hr, capable of burning any combination of natural gas and number 2 fuel oil, with emissions exhausted through a 75 ft. stack

Record Keeping and Reporting Requirements

A.5. The owner or operator shall make and keep records of: a. The number of hours each emissions unit operates every year; and b. The total fuel consumption of all five units combined each year. Such records shall be prepared no later than thirty days after the end of each fiscal year.
[Rule 62-4.070(3), F.A.C.]

Common Conditions

A.6. This emissions unit is also subject to conditions E.1 through E.19, except for E.3, E.7. E.8, E.9, E.10, E.11 and **E.18**, contained in **Subsection E. Common Conditions.**

Subsection B. This section addresses the following emissions unit.

E. U. ID No.	Brief Description
007	Fossil Fuel Steam Generating Unit I (S-1), nominally rated at 7.5 MW, 111 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil, with emissions exhausted through a 60 ft. stack

{Permitting note(s): The emissions unit is regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with Less than 250 million Btu per Hour Heat Input, and Rule 62-296.570, F.A.C., NOX RACT. Fossil fuel fired steam generator Unit 1 (S-1) began commercial operation in 1961.)

Compliance Assurance Monitoring (CAM) does not apply to this emissions unit.

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum operation heat input rate is as follow:

Unit No	mmBtu/hr Heat Input	Fuel Type
007	111	Natural Gas
	111	No 6. Fuel Oil

[Rules 62-4.160(2), 62-2-10.200(PTE) and 62-296.406, F.A.C.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.3-10(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.)

B.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition E.14
[Rule 62-297.3-10(2), F.A.C.]

B.3. Methods of Operation. Fuels.
a. Startup: The only fuel(s) allowed to be burned are any combination of natural gas and/or number 6 fuel oil.
b. Normal: The only fuel(s) allowed to be burned are any combination of natural gas and/or number 6 fuel oil.
[Rule 62-213.410, F.A.C.]

Emission Limitations and Standards

(Permitting note: Unless otherwise specified, the averaging time for Specific Conditions B.4. through **B.8.** are based on the specified averaging time of the applicable test method.)

B.4. Visible Emissions. Visible emissions shall not exceed 20 percent opacity, except for one two-minute period per hour during which opacity shall not exceed 40 percent.
[Rule 62-296.406(1), F.A.C.]

B.5. Visible emissions – Soot Blowing and Load Change. Visible emissions shall not exceed 60 percent opacity during the : hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.
[Rule 62-2 10.700(3), F.A.C.]

B.6. Particulate Matter. Particulate matter emissions shall be controlled by the firing of natural gas and/or low sulfur content liquid fuel. See specific condition **B.7.**
[Rules 62-4.070(3) and 62-296.406(2), F.A.C.]

B.7. Sulfur Dioxide – Sulfur Content. The No. 6 fuel oil sulfur content shall not exceed 2.25 percent, by weight. See specific condition **B.10.**
[Rules 62-4.070(3) and 62-296.406(3), F.A.C.; BACT for this unit assumed to equal the sulfur limit established by PPSC No. PA 74-05 for units S-3 and S-4]

B.8. NO_x RACT. Emissions of nitrogen oxides (NO_x) from these emissions units shall not exceed 0.50 pounds per million Btu while firing natural gas or number 6 fuel oil.
[Rule 62-296.570, F.A.C.]

Test Methods and Procedures

B.9. Sulfur Dioxide – Sulfur Content. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by fuel sampling and analysis. See specific conditions **B.7** and **B.10.**
[Rules 62-213.440 and 62-296.406(3), F.A.C.]

B.10. Fuel Sampling & Analysis – Sulfur. For this emissions unit, the following fuel sampling and analysis protocol shall be used to demonstrate compliance with the fuel sulfur limitation of specific condition 8.7 of this permit:

a. Sample the as-fired fuel oil each day fuel oil is fired.

b. Composite the daily samples and each month determine and record the as-fired fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-94, ASTM D4294-90(95), ASTM D1S52-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95 (or latest editions) to analyze a representative sample of the composited as-tired fuel oil.
[Rules 62-4.070(3) and 62-21-3.440, F.A.C.]

B.11. NO_x Testing. Compliance with the NO_x emission limitation shall be demonstrated by annual emission testing in accordance with EPA Test Method 7E or other EPA- or DEP-approved test methods
[Rule 62-296.570, F.A.C.]

Monitoring of Operations

B.12. Annual Tests Required – NO_x and VE. Except as provided in specific conditions E.6 through E.8 of this permit, emission testing for nitrogen oxide emissions and visible emissions shall be performed annually, no later than the end of each federal fiscal year (September 30), except for units that are not operating because of scheduled maintenance outages and emergency repairs, which will be tested within thirty days of returning to service. Annual compliance testing while firing oil is not required for units that operated on oil for less than 400 hours in the previous federal fiscal year (ending September 30th). [Rules 62-4.070(3) and 62-213.440, F.A.C.]

Common Conditions

B.13. This emissions unit is also subject to conditions **E.1 through E.19, except for E.2, E.9 and E.18,** contained in **Subsection E. Common Conditions**.

Subsection C. This section addresses the following emissions units.

009	Fossil Fuel Steam Generating Unit 3 (S-3), nominally rated at 26.5 MW, 325.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil, with emissions exhausted through a 113 ft. stack
~~010~~	~~Fossil Fuel Steam Generating Unit 4, (S-4), nominally rated at 33 MW, 419.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil, with emissions exhausted through a 115 ft. stack~~

(Permitting note(s): The emissions units are regulated under Acid Rain, Phase 11, Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input, and Rule 62-296.570, F.A.C., NO_X RACT, Power Plant Siting Certification No. PA 74-05, and the modified conditions of PA 74-05 ordered September 28, 1987. Fossil fuel fired steam generator Unit 3 (S-3) began commercial operation in 1966; ~~and, fossil fuel fired steam generator Unit 4 (S-4) began commercial operation in 1970~~. The permittee reported it operates the following continuous monitors for Unit S-3: NOX, CO_2, ~~flow~~ and~~,~~ visible emissions~~, and temperature~~.}

Compliance Assurance Monitoring (CAM) *does not apply* to these emissions units.

The following specific conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The maximum operation heat input rates are as follows:

Unit No.	mmBtu/hr Heat Input	Fuel Type
009	325.1	Natural Gas
	325.1	No. 6 Fuel Oil
~~010~~	~~419.1~~	~~Natural Gas~~
	~~419.1~~	~~No. 6 Fuel Oil~~

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.405, F.A.C.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.3 10(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.)

C.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition E.14
[Rule 62-297.3 10(2), F.A.C.]

C.3. Methods of Operation. Fuels.
a. Startup: The only fuel(s) allowed to be burned are any combination of natural gas andlor number 6 fuel oil.
b. Normal: The only fuel(s) allowed to be burned are any combination of natural gas and/or number 6 fuel oil.
[Rule 62-213.410, F.A.C.]

Emission Limitations and Standards

{Permitting note: Unless otherwise specified, the averaging time for Specific Conditions C.4. through C.9. are based on the specified averaging time of the applicable test method.)

C.4. Visible Emissions. Visible emissions shall not exceed 20 percent opacity, except for one two-minute period per hour during which opacity shall not exceed 40 percent. Emissions units governed by this visible emissions limit shall compliance test for particulate matter emissions annually and as otherwise required by Chapter 62-297, F.A.C.
[Rule 62-296.405(1)(a), F.A.C.]

C.5. Visible Emissions - Soot Blowing and Load Change. ~~(The following paragraph is applicable only to emissions unit 010 (Unit S-4) and only until installation of an operational continuous opacity monitor at Unit S-4.) Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.~~

~~A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.~~

(The following paragraph is applicable to emissions unit 009 (Unit S-3) ~~and will become applicable to emissions unit 010 (Unit S-4) only upon installation of an operational continuous opacity monitor at Unit S-4.)~~ Visible emissions above 60 percent opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions allowed by this condition. [Rule 62-210.700(3), F.A.C., Note: Unit S-3 has an operational continuous opacity monitor. ~~Unit S-4 may install an operational continuous opacity monitor in the future, and at that time be allowed visible emissions greater than 60% opacity pursuant to Rule 62-210.700(3), F.A.C., and specific condition C.5~~

C.6. Particulate Matter. Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods. [Rule 62-296.405(l)(b): F.A.C.] C.7. Particulate Matter - Soot Blowing aid Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change. [Rule 62-210.700(3), F.A.C.]

C.8. Sulfur Dioxide - Sulfur Content. The No. 6 fuel oil sulfur content shall not exceed 2.25 percent, by weight. See specific condition C.11.
[Rules 62-4.070(3) and 62-213.440, F.A.C., and Power Plant Siting Certification No. PA 74-05]

C.9. NO_X RACT. Emissions of nitrogen oxides (NO_X) from these emissions units shall not exceed 0.50 pounds per million Btu while firing natural gas or number 6 fuel oil or combination thereof.
[Rule 62-296.570, F.A.C.]

Test Methods and Procedures

C.10. Particulate Matter. The test methods for particulate emissions shall be EPA Methods 17, 5, SB, or 5F, incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen based F-factor, computed according to EPA Method 19, is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17.
[Rules 62-213.440,62-296.405(1)(e)2., and 62-297.401, F.A.C.]

C.11. Sulfur Dioxide - Sulfur Content. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by fuel sampling and analysis. See specific conditions C.8. and C.12.
[Rules 62-2 13.440 and 62-296.406(3), F.A.C.]

C.12. Fuel Sampling & Analysis - Sulfur. For each emissions unit, the following fuel sampling and analysis protocol shall be used to demonstrate compliance with the the fuel sulfur limitation of specific condition C.8 of this permit:

a. Sample the as-fired fuel oil each day fuel oil is fired.

b. Composite the daily samples and each month determine and record the as-fired fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-94, ASTM D4294-90(95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95 (or latest editions) to analyze a representative sample of the composited as-fired fuel oil. Each composite sample shall also be analyzed for heating value.

c. Record monthly the amount of each fuel fired, and maintain records of the monthly analyses of the heating value of each fuel, and the percent sulfur content by weight of each fuel, to enable calculations of sulfur dioxide emissions.

[Rules 62-4.070(3) and 62-213.440, F.A.C., and PPSC PA 74-05]

C.13. NO_X Testing. ~~Compliance with the NO_x emission limitation shall be demonstrated by annual emission testing in accordance with EPA Test Method 7E, for emissions unit 010. If a continuous emission monitoring system (CEMS) for NO_x is installed at emissions unit 010, compliance shall then be demonstrated by the CEMS.~~ Compliance with the NO_X emission limitation shall be demonstrated by a CEMS for emissions unit 009. See specific conditions C.15 and C.16.
[Rule 62-296.570, F.A.C.]

Monitoring of Operations

C.14. Annual Tests Required - PM and VE. Except as provided in specific conditions E.6 through E:8 of this permit, emission testing for particulate matter emissions and visible emissions shall be performed annually, no later than the end of each federal fiscal year (September 30), except for units that are not operating because of scheduled maintenance outages and emergency repairs, which will be tested within thirty days of returning to service.
[Rules 62-4.070(3) and 62-213.440, F.A.C.]

~~**C.15.** Annual NOX Tests Required - Unit 4 (S-4, Emissions Unit 010). For emissions unit 010, emission testing for NOs shall be performed annually, no later than the end of each federal fiscal year (September 30), except for units that are not operating because of scheduled maintenance outages and emergency~~

~~repairs, which will be tested within thirty days of returning to service. Annual compliance testing while firing oil is not required for units that operated on oil for less than 400 hours in the previous federal fiscal year (ending September 30th).~~

~~Should the owner or operator install a continuous emission monitoring system (CEMS) for NO_x emissions at emission unit 010, compliance with the NO_x limitation shall be demonstrated with the CEMS. Compliance shall be based on a 30-day rolling average. The CEMS shall be properly maintained and operated and shall meet the performance specifications of 40 CFR 60, Appendix B, or 40 CFR 75. The CEMS data shall be maintained on site for inspection by the Department.~~
~~[Rules 62-4.070(3), 62-213.410, F.A.C. and 62-296.570(4)(a)3. & 4.1~~

C.16. NO_X CEMS Required - Unit 3 6-3. Emissions Unit 009). For emissions unit 009, compliance with the NO_X limitation shall be demonstrated with a continuous emission monitoring system (CEMS). Compliance shall be based on a 30-day rolling average, excluding periods of startup, shutdown or malfunction as provided by Rule 62-210.700, F.A.C., if the CEMS is properly maintained and operated and meets the performance specifications of 40 CFR 60, Appendix B, or 40 CFR 75. The CEMS data shall be maintained on site for inspection by the Department and need not be submitted to the Department unless specifically requested.

If the CEMS is *not properly maintained and operated*, as described in the above paragraph, compliance with the NO_X limitation shall be demonstrated by annual emission testing in accordance with EPA Test Method 7E.
[Rules 62-4.070(3), 62-21 3.440, F.A.C. and 62-296.570(4)(a)4., and request of applicant]

Common Conditions

C.17. This emissions unit is also subject to conditions E.1 through E.19, except for E.2 and E.9, contained in Subsection E. Common Conditions.

Subsection E. Common Conditions.

E.U. ID No.	Brief Description
001 to 005	Five 2000 kW diesel engine generators
~~007~~	~~Fossil Fuel Steam Generating Unit 1 (S-1)~~
009	Fossil Fuel Steam Generating Unit 3 (S-3)
~~010~~	~~Fossil Fuel Steam Generating Unit 4, (S-4)~~
060	Gas Turbine #1, (GT-1)
011	Combined Cycle Unit, Unit (GT-2/S-5)

The following conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

E.1. Hours of Operation. The emissions units may operate continuously, i.e., 8,760 hours/year [Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards (Permitting note:

Table 1-1 Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.)

Excess Emissions

E.2. (This condition is applicable only to emissions units 001 - 005,006 and 011.) Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided (I) that best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed hvo hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

E.3. (This condition is applicable only to emissions units ~~007~~,009 and ~~010~~.) Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. Excess emissions resulting from malfunction shall be permitted provided (1) that best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1) & (2), F.A.C.]

E.4. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.]

E.7. When PM Tests Not Required. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units while burning:

a. only gaseous fuel(s); or
b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
c. only liquid fuel(s) for less than 400 hours per year.

[Rules 62-297.3 10(7)(a)3. & 5., F.A.C.; and, ASP Number 97-B-01 .]

E.8. When VE Tests Not Required. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:

a. only gaseous fuel(s); or
b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-4.070(3), F.A.C.]

Test Methods and Procedures

{Permitting Note: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

E.9. **(This condition is applicable only to emissions units ~~001-005~~, 006 and 011.)** Visible Emissions-Turbines, ~~Diesel Engine Generators~~. The test method for visible emissions for emissions units 006 (GT-I), and 011 (GT-21s-5), ~~and 001 through 005 (diesel engine generators)~~ shall be EPA Method 9, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C. [Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C., and modified conditions of PA 74-05 ordered September 28, 1987].

E.10. (This condition is applicable only to emissions units ~~007~~,009 and ~~010.~~) Visible Emissions - Boilers. The test method for visible emissions for emissions units ~~007 (S-1)~~, 009 (S-3) and ~~010 (S-4)~~ shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C. See specific condition E.11
[Rule 62-296.405(1)(e)I., F.A.C.]

E.11. (This condition is applicable only to emissions units ~~007~~,009 and ~~010.~~) DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intends during the required period of observation.

2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity). The test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g , 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:

a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.

b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value. [Rule 62-297.401, F.A.C.]

E.12. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.]'

E.16. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-I, Stack Sampling Facilities, attached to this permit.- Temporary stack sampling facilities under Rule 62-297.310(6)(b), F.A.C. may be used in lieu of permanent facilities. [Rule 62-297.3 10(6), F.A.C.]

Recordkeeping and Reporting Requirements

E.17. Malfunctions - Notification. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Palm Beach County Health Department's Air Section in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Palm Beach County Health Department's Air Section.
[Rule 62-210.700(6), F.A.C.]

E.18. (This condition is applicable only to emissions units 009 and ~~010.~~) Excess Emissions - Report. Submit to the Palm Beach County Health Department's Air Section a written report of emissions in excess of emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years. [Rules 62-213.440 and 62-296.405(1)(g), F.A.C.]

E.19. Test Reports.
(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Palm Beach County Health Department's Air Section on the results of each such test.
(b) The required test report shall be filed with the Palm Beach County Health Department's Air Section as soon as practical but no later than 45 days after the last sampling run of each test is completed.
(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Palm Beach County Health Department's Air Section to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances. 8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620; F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used. 10. The number of points sampled and configuration and location of the sampling plane.

Section IV. This section is the Acid Rain Part.

Operated by: City of Lake Worth Utilities **ORIS code: 0673**

Subsection A. This subsection addresses Acid Rain, Phase 11.

The emissions unit(s) listed below are regulated under Acid Rain, Phase 11

E.U. ID	Brief Description
009	Fossil Fuel Steam Generator, Unit 3, (S-3)
~~010~~	~~Fossil Fuel Steam Generator, Unit 4, (S-4)~~

1. The Phase II permit application(s) submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain unit(s) must comply with the standard requirements and special provisions set forth in the application(s) listed: No. 009 010

a. DEP Form No. 62-210.900(1)(a), signed by the Designated Representative on 08/21/02 [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

2. Sulfur dioxide (SO_2) allowance allocations for each Acid Rain unit are as follows:

EU ID No.	EPA ID	Years	2003	2004	2005	2006	2007
009	S-3	SO_2 allowances under Table 2 if 40 CFR Part 73	89*	89*	89*	89*	89*
~~010~~	~~S-4~~	~~SO_2 allowances under Table 2 if 40 CFR Part 73~~	~~0*~~	~~0*~~	~~0*~~	~~0*~~	~~0*~~

The number of allowances held by an Acid Rain for each Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2 of 40 CFR 73.

3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

1. No permit revision shall be required for increase in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.

2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.

3. Allowances shall be accounted for under the Federal Acid Rain Program.

[Rule 62-213.440(1)(c), F.A.C.]

City of Lake Worth Utilities
Tom G. Smith Power Plant and Lake Worth Water Treatment Plant
Facility ID No. **0990045**

~~Table 1-1, Continued~~

Unit Retired

~~Emissions Unit~~	~~Brief Description~~
~~007~~	~~Fossil Fuel Steam Generating Unit (S-1), nominally rated at 7.5 MW, 111 mmBtu/hr, capable of burning any combination of natural gas and No.6 fuel oil~~

			~~Allowable Emissions~~			~~Equivalent Emissions~~			
~~Pollutant~~	~~Fuel(s)~~	~~Hours per Year~~	~~Standard(s)~~	~~Lbs/hour~~	~~TPY~~	~~Lb/hour~~	~~TPY~~	~~Regulatory Citations~~	~~See Permit Condition(s)~~
~~VE Steady State~~	~~Oil, Natural Gas~~	~~8760~~	~~20% opacity, except for 40% for 2 min. each hour~~					~~Rule 62-296.406(1), F.A.C.~~	~~B.4~~
~~VE Soot Blowing or Load Change~~	~~Oil, Natural Gas~~	~~8760~~	~~60% opacity~~					~~Rule 62-210.700(3), F.A.C~~	~~B.5~~
~~SO_2 (& PM)~~	~~Oil, Natural Gas~~	~~8760~~	~~2.25% S by weight, fuel oil~~			~~267* (oil)~~	~~1,170* (oil)~~	~~Rules 62-4.070(3) & 296.406(3)., F.A.C.~~	~~B.7~~
~~NOx~~	~~Oil, Natural Gas~~	~~8760~~	~~0.5 lb/mmBtu~~			~~56~~	~~243~~	~~Rules 62-296.570, F.A.C.~~	~~B.8~~

~~* Equivalent emissions are for SO_2 emissions firing fuel oil.~~

City of Lake Worth Utilities
Tom G. Smith Power Plant and Lake Worth Water Treatment Plant
Facility ID No. **0990045**

Table 1-1, Continued

EU010 Retired

Emissions Unit	Brief Description
009	Fossil Fuel Steam Generating Unit 3 (S-3), nominally rated at 26.5 MW, 325.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil
~~010~~	~~Fossil Fuel Steam Generating Unit, (S-4), nominally rated at 33MW, 419.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil~~

			Allowable Emissions			Equivalent Emissions[1]			
Pollutant	Fuel(s)	Hours per Year	Standard(s)	Lbs/hour	TPY	Lbs/hour	TPY	Regulatory Citations	See Permit Condition(s)
VE Steady State	Oil, Natural Gas	8760	20% opacity, except for 40% for 2 min. each hour					Rule 62-296.405(1)(a), F.A.C.	C.4
VE Soot Blowing or Load Change	Oil, Natural Gas	8760	60% opacity (>60% opacity for not more than 4, six-minute periods per hour during 3 hours allowed for sootblowing/load change)					Rule 62-210.700(3), F.A.C.	C.5
PM Steady State	Oil, Natural Gas	8760	0.1 lb/mmBtu			33 (EU009) ~~43 (EU010)~~	142 (EU009) ~~184 (EU010)~~	Rule 62-296.405(1)(b), F.A.C.	C.6
PM Soot Blowing or Load Change	Oil, Natural Gas	8760	0.3 lb/mmBtu			99 (EU009) ~~126 (EU010)~~	426 (EU009) ~~552 (EU010)~~	Rule 62-210.700(3), F.A.C.	C.7

Table 1-1 Continued, Emissions Unit 009

			Allowable Emissions			Equivalent Emissions			
Pollutant	Fuel(s)	Hours per year	Standard	lbs/hour	TPY	lbs/hour	TPY	Regulatory Citations	See Permit Conditions
SO_2	Oil, Natural Gas	8760	2.25% S by weight, fuel oil			832 (EU 009) (oil)	1072 (EU 009) (oil)	Rule 62-213.440 F.A.C. & PPSC No. PA 74-05	C.8
NO_x	Oil, Natural Gas	8760	0.5 lb/mmBtu			163 (EU 009) 210 (EU 010)	712 (EU 009) 918 (EU 010)	Rules 62 296.570. F.A.C.	C.9

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(oil)
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(EU 010)
Deleted: (oil)

City of Lake Worth Utilities
Tom G. Smith Power Plant and Lake Worth Water Treatment Plant
Facility ID No. **0990045**

Table 2-1 Continued, Emissions Unit 009

009	Fossil Fuel Steam Generating Unit 3 (S-3) nominally rated at 26.5, 325.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil						
Pollutant or parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date[1]	Minimum Compliance Test Duration	CMS[2]	See Permit Condition(s)
SO_2	Oil, Natural gas	Fuel sampling & analysis	Sampling daily, analysis of monthly composite	No		NO	C.8, C.11 & C.12
NO_X	Oil, Natural gas	CEMS	Continuous			Yes	C.13 & C.16
PM	Oil, Natural gas	EPA Test Methods, 15, 5, 5B or 5F	Annual		3 hours	No	C.10 & E.14
VE	Oil, Natural gas	DEP Method 9	Annual		1 hour	Yes	C.14 & E.10

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Deleted: Fossil Fuel Steam Generating Unit 4, (S-4), nominally rated at 33 MW, 419.1 mmBtu/hr of burning any combination of natural gas and number 6 fuel oil

Deleted: (EU 009)

Deleted: NO_{X} (EU 010)

Deleted: Oil, Natural gas

Deleted: EPA Test Method 7E¶ (If CEMS installed see next row)

Deleted: Annual

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Deleted: No

Deleted: C.13 & C.15

Deleted: NO_X¶ (EU 010)

Deleted: Oil, Natural gas

Deleted: CEMS (if installed

Deleted: Continuous

Deleted: Yes, if installed for Acid Rain

Deleted: C.13 & C.15

Appendix I-1, List of Insignificant Emissions Units and/or Activities

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)l., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)l., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)l., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities
1. Dust collector hopper discharge valve for Unit S-3.
2. Liquid propane gas emergency generator.
3. Portable electrical generators that can be moved by hand from one location to another.
4. Air compressors and pneumatically operated equipment, including hand tools.
5. Storage tanks, vessels, and containers that hold or store liquid substances that will not have the potential to emit VOC or HAPS greater than the de minimis quantities.
6. Janitorial services and consumer use of janitorial products.
7.Diesel-fired generator
8.Diesel tank (6,000 gallons)
9.Mechanical draft cooling towers (2)

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☐ 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).

☒ 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.

☐ 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.

2. Description of Emissions Unit Addressed in this Section:
Diesel Generator Units 1 through 5, each 2,000 kW

3. Emissions Unit Identification Number: **001, 002, 003, 004, and 005**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**1965**	**49**	☐ Yes ☐ No

9. Package Unit:
Manufacturer: **GM EMD** Model Number: **567D4**

10. Generator Nameplate Rating: **2** MW Each

11. Emissions Unit Comment:

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

2. Control Device or Method Code(s):

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: **105** million Btu/hr **Total**	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: hours/day weeks/year	days/week **8,760** hours/year **Each**
6. Operating Capacity/Schedule Comment: **Each diesel generator has a rated heat input of 21 MMBtu/hr.**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **MU-1, MU-2, MU-3, MU-4, MU-5**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: **MU-1 Diesel Generating Unit 1** **MU-2 Diesel Generating Unit 2** **MU-3 Diesel Generating Unit 3** **MU-4 Diesel Generating Unit 4** **MU-5 Diesel Generating Unit 5**		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **N/A**		
5. Discharge Type Code: **V**	6. Stack Height: **16.5** feet	7. Exit Diameter: **1.83** feet
8. Exit Temperature: **667** °F	9. Actual Volumetric Flow Rate: **19,208** 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): **592.8** North (km): **2943.7**	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **The operating parameters for all five diesel units are identical.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Internal Combustion Engines – Electric Generation-Distillate Oil (Diesel)**		
2. Source Classification Code (SCC): **2-01-001-02**	3. SCC Units: **1,000 gallons burned**	
4. Maximum Hourly Rate: **0.15**	5. Maximum Annual Rate: **1,320**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.23**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **139.30**
10. Segment Comment: **Fuel flow rates are per diesel generator.**		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
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:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO_2	---	---	NS
NO_x	---	---	EL
CO	---	---	NS
VOC	---	---	NS
PM	---	---	NS
PM_{10}	---	---	NS

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **99.8** lb/hour **436.91** tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **4.75 lb NO_x per mmBtu** Reference: **NO_x RACT Rule**	7. Emissions Method Code: **1**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Potential emissions based on oil firing. (4.75 lb NO_x per mmBTU x 1,320.603 per 1,000 gal Oil/yr x 139.3 mmBtu/1,000 gal Oil) / 2,000 lb/ton.

Potential annual emissions for the 5 diesel generators=2,185 TPY.

11. Potential, Fugitive, and Actual Emissions Comment:

Potential emissions are based on maximum heat input, 8,760 hr/yr, and the minimum heating value of oil reported from 1992 through 2002.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **Rule**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **4.75 lb NO_x per mmBtu**	4. Equivalent Allowable Emissions: **499** lb/hour **2,185** tons/year
5. Method of Compliance: **EPA Test Method 7E conducted annually, when burning liquid fuels for 400 or more hours per year.**	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: **VE**	2. Basis for Allowable Opacity: ☐ Rule ☒ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment: **The requirement for VE testing was removed in the 2002 TV renewal.**	

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be 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:	

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:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **LW-EU1-I1** ☐ Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☒ Attached, Document ID: **LW-EU1-I2** ☐ Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☐ Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date _____
   ☐ Not Applicable

6. Compliance Demonstration Reports/Records
   ☐ Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☒ Previously Submitted, Date: **LW-EU1-I6**
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   ☐ Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Air Construction Permit Applications

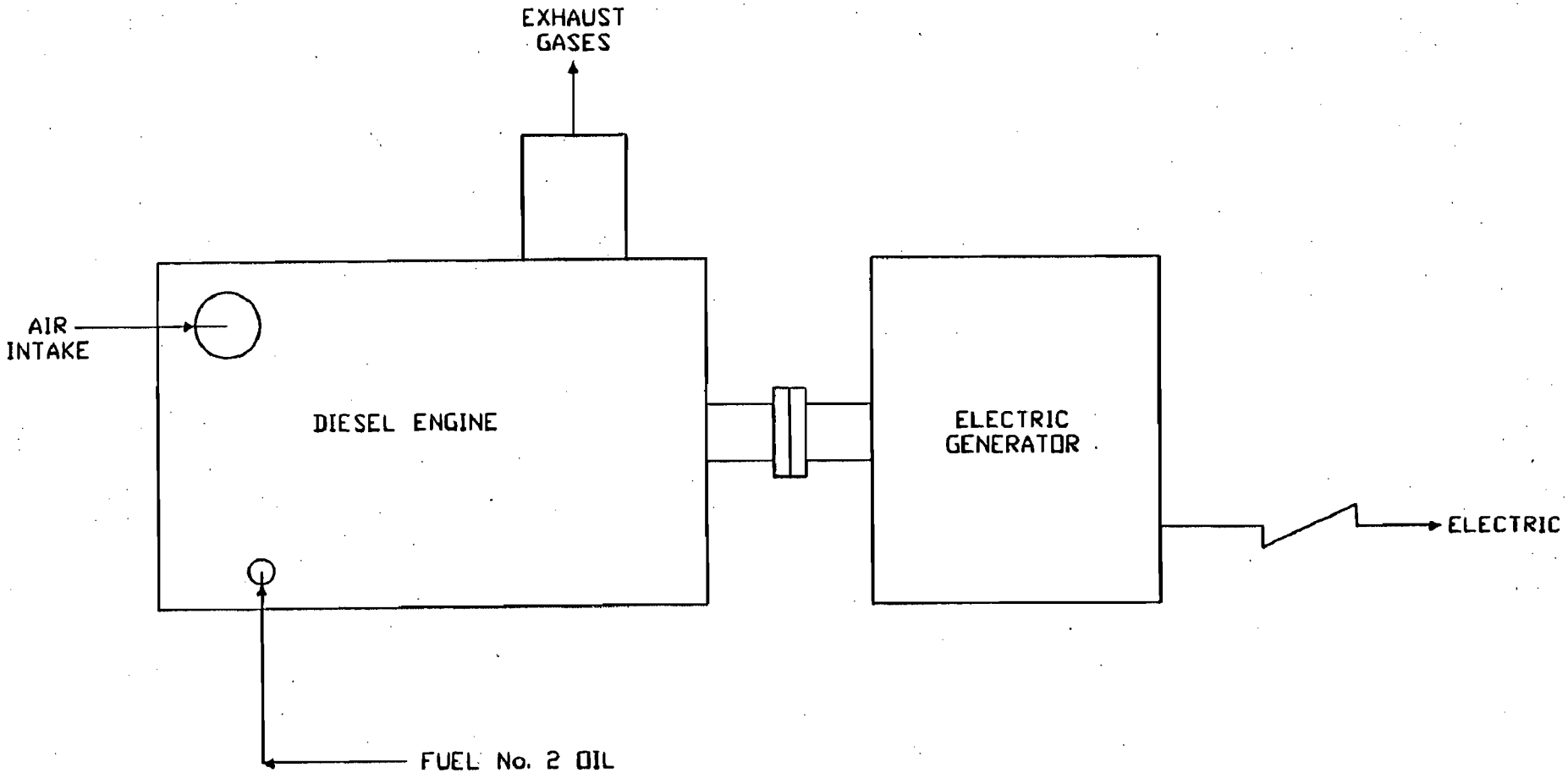
1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **LW-EU1-IV1**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
   ☐ Copy Attached, Document ID:
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

Additional Requirements Comment

Attachment LW-EU1-I1
Process Flow Diagram



Tom G. Smith Power Plant Title V Emissions - MU-1 through MU-5 Diesel Units 1 through 5

Attachment LW-EU1-I1
Process Flow Diagram
Lake Worth Utilities - City of Lake Worth, Florida

Source: Golder, 2002.

Golder Associates

Attachment LW-EU1-I2
Fuel Analysis or Specification

CITY OF LAKE WORTH

1900 2ND AVENUE NORTH
LAKE WORTH, FLORIDA 33461-4298

UTILITIES DEPARTMENT
POWER RESOURCES

(561) 586-1703
FAX (561) 586-1759

April 29, 2002

Mr. Laxmana Tallam
Supervisor of Permitting, Compliance & Enforcement
Florida Department of Environmental Protection
Post Office Box 15425
400 North Congress Avenue
West Palm Beach, Florida 33416

Subject: **City of Lake Worth Utilities**
Quarterly Fuel Oil Analysis Reports
First Quarter 2002 (Jan- Feb - Mar)

Dear Mr. Tallam:

Please find attached our quarterly fuel oil analysis as required by our operating permit. Samples reported below have been collected from a composite sample from the on site oil storage facility.

On site quarterly sample:

Type	Date	%S	Note
No.6	04/01/02	1.97	On site quarterly sample
No.2	04/01/02	0.0390	On site quarterly sample

The results indicate the oil is within our permit limits of 0.35% sulfur for No. 2 oil and 2.25% sulfur for No. 6 oil. If you need more information, please do hesitate to call me at 561.533.7379 or email at mridge@lakeworth.net.

Sincerely,
CITY OF LAKE WORTH UTILITIES

Mike Ridge
Environmental/ Performance Specialist

Attachments

cc: A.J. Satyal, Environmental Manager, Palm Beach County Health Unit
Larry Baker, Power Resources Superintendent
Margaret Johnstone, Environmental Compliance Officer
Joe Brockway, Results Supervisor

SAYBOLT LP.
2610 So. Federal Highway
Fort Lauderdale, FL. 33316

Saybolt
A CORE LABORATORIES COMPANY

LABORATORY NO.: 0483

CUSTOMER
REF. NO(S): #129018/

LABORATORY ANALYSIS REPORT

DATE: 04/08/02
INVOICE NO:

DESCRIPTION

- **Sample designated as:**
  #2 FUEL OIL
- **Identifying Marks:**
  SUBMITTED QUARTERLY
  SAMPLE (04/01/02)
  CITY POWER PLANT
  LAKE WORTH, FLORDA
- **Submitted by:**
  CITY OF LAKE WORTH
- **Client:**
  CITY OF LAKE WORTH

SAMPLES SHALL BE RETAINED BY SAYBOLT INC. FOR FORTY-FIVE (45) DAYS UNLESS OTHERWISE REQUESTED IN WRITING.

NOTES

- This laboratory report may not be published or used except in full. It shall not be used in connection with any form of advertising unless written consent is received from an officer of Saybolt Inc.
- Results were based on analysis made at the time samples were received at the laboratory.
- Sample nomenclature is designated by the customer.

ANALYSIS

TEST	METHOD	RESULT
GRAVITY, API AT 60 F	D-1298	34.7
GRAVITY, SPECIFIC	D-1298	0.8514
SULFUR, X-RAY, WT PCT	D-4294	0.0390
ASH, WT PCT	D-482	0.0036
HEAT OF COMBUSTION, BTU/LB	D-4868	19576
HEAT OF COMBUSTION, BTU/GAL		139011
HEAT OF COMBUSTION, BTU/BBL		5838462

MEMBERS ASTM-API-SAE

SAYBOLT

Attachment LW-EU1-I6
Compliance Test Report

ATTACHMENT LW-EU1-I6

COMPLIANCE TEST REPORT

The Compliance Tests and dates submitted for Diesel Generator Units 1-5 (M1-5) are as listed below.

M-Units			
M-1(EU001)	Tested 9/27/2000	Submitted 12/01/2000	NO_x, VE
M-2(EU002)	Tested 9/11/2001	Submitted 10/17/2001	NO_x
M-3(EU003)	Tested 9/27/2000	Submitted 12/01/2000	NO_x, VE
M-4(EU004)	Tested 2/13/1997	Submitted 3/19/1997	NO_x
M-5(EU005)	Tested 2/13/1997	Submitted 3/19/1997	NO_x

Attachment LW-EU1-IV1
Identification Of Applicable Requirements

NOTICE OF FINAL TITLE V AIR OPERATION PERMIT REVISION

In the Matter of an
Application for Permit Revision by:

Mr. George Adair
Assistant City Manager/Utilities Director
1900 2nd Avenue North
Lake Worth, FL 33461

FINAL Permit Project No.: 0990045-004-AV
Tom G. Smith Power Plant
Palm Beach County

Enclosed is the FINAL Permit, No. 0990045-004-AV, for the Title V Air Operation Revision. The purpose of this permit revision is to reflect the shutdown of the SO2 CEMS on EU 009, Fossil Fuel Steam Generating Unit (S-3). The facility currently demonstrates compliance of SO2 with the liquid fuel sulfur limit by fuel sampling and analysis. The SO2 CEMS served to demonstrate compliance with Acid Rain requirements. The facility has now chosen to demonstrate compliance with the Acid Rain requirements by complying with 40 CFR Part 75, Appendix D, Optional SO2 Emissions Data Protocol for Gas-Fired and Oil-Fired Units. Therefore, the CEMS SO2 and CEMS flow meter will be removed from service. All references to the Unit S-3 SO2 CEMS are removed from the Title V permit. The facility is located in Palm Beach County. This permit revision is issued pursuant to Chapter 403, Florida Statutes (F.S.). There were no comments received from Region 4, U.S. EPA, regarding the PROPOSED Permit.

Any party to this order (permit revision) has the right to seek judicial review of the permit revision 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.

State of Florida Department
Of Environmental Protection

Trina L. Vielhauer, Chief
Bureau of Air Regulation

TLV/cem

7005 1160 0004 3034 3045

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Mr. George Adair, Assistant City Mgr. OFFICIAL USE

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Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	$

Postmark Here

Sent To: Mr. George Adair, Assistant City Mgr.
Street, Apt. No.; or PO Box No.: 1900 2nd Avenue North
City, State, ZIP+4: Lake Worth, Florida 33461

PS Form 3800, June 2002 — See Reverse for Instructions

SENDER: CO ... LIVERY

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

1. Article Addressed to:

Mr. George Adair
Assistant City Manager/Utilities Director
1900 2nd Avenue North
Lake Worth, Florida 33461

A. Signature
X [signature] ☐ Agent ☐ Addressee

B. Received by (Printed Name) | C. Date of Delivery: 9-28

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

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

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

2. Article Number *(Transfer from service label)* 7005 1160 0004 3034 3045

PS Form 3811, February 2004 — Domestic Return Receipt — 102595-02-M-1540

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL TITLE V AIR OPERATION PERMIT REVISION (including the FINAL Determination and the FINAL Permit) was sent by certified mail or electronically (with Received Receipt) before the close of business on 9/26/05 to the person(s) listed or as otherwise noted:

George Adair, Assistant City Manager/Utilities Director

The undersigned duly designated deputy agency clerk hereby certifies that a copy of this NOTICE OF FINAL TITLE V AIR OPERATION PERMIT REVISION was sent by U.S. Mail or electronically (with Received Receipt) before the close of business on 9/26/05 to the person(s) listed or as otherwise noted:

Scott Osbourn, P.E. Golder (sosbourn@golder.com)
Jim Stormer, PBCHD

Barbara Friday, BAR [barbara.friday@dep.state.fl.us] (for posting with Region 4 , U.S. EPA)

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.

Barbara J. Friday 9/26/05
(Clerk) (Date)

Friday, Barbara

To: 'sosbourn@golder.com'; JimStormer@doh.state.fl.us

Cc: Mulkey, Cindy

Subject: FINAL Title V Permit Revision No.: 0990045-004-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant

Attachments: 0990045.004.AV.F[1].zip

Attached for your records is a zip file for the subject FINAL Title V Permit Revision.

If I may be of further assistance, please feel free to contact me.

Barbara J. Friday
Planner II
Bureau of Air Regulation
(850)921-9524
Barbara.Friday@dep.state.fl.us

FINAL Determination

Title V Air Operation Permit Revision
FINAL Permit Project No.: 0990045-004-AV
Revision to Title V Air Operation Permit No.: 0990045-003-AV
City of Lake Worth Utilities
Tom G. Smith Power Plant

I. Comment(s).

No comments were received from the USEPA during their 45 day review period of the PROPOSED Permit.

II. Conclusion.

In conclusion, the permitting authority hereby issues the FINAL Permit.

STATEMENT OF BASIS

City of Lake Worth Utilities
Tom G. Smith Power Plant and Lake Worth Water Treatment Plant
Facility ID No.: 0990045
Palm Beach County

Title V Air Operation Permit Revision
FINAL Permit Project No.: 0990045-004-AV

This Title V Air Operation Permit Revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

The purpose of this permit revision is to reflect the shutdown of the SO2 CEMS on EU 009, Fossil Fuel Steam Generating Unit (S-3). The facility currently demonstrates compliance of SO2 with the liquid fuel sulfur limit by fuel sampling and analysis. The SO2 CEMS served to demonstrate compliance with Acid Rain requirements. The facility has now chosen to demonstrate compliance with the Acid Rain requirements by complying with 40 CFR Part 75, Appendix D, Optional SO2 Emissions Data Protocol for Gas-Fired and Oil-Fired Units. Therefore, the CEMS SO2 and CEMS flow meter will be removed from service. All references to the Unit S-3 SO2 CEMS are removed from the Title V permit.

The following **Permitting Note of Section III. C.** is changed as follows:

FROM:

Subsection C. This section addresses the following emissions units.

009	Fossil Fuel Steam Generating Unit 3 (S-3), nominally rated at 26.5 MW, 325.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil, with emissions exhausted through a 113 ft. stack
010	Fossil Fuel Steam Generating Unit 4, (S-4), nominally rated at 33 MW, 419.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil, with emissions exhausted through a 115 ft. stack

{Permitting note(s): The emissions units are regulated under Acid Rain, Phase II, Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input, and Rule 62-296.570, F.A.C., NOx RACT, Power Plant Siting Certification No. PA 74-05, and the modified conditions of PA 74-05 ordered September 28, 1987. Fossil fuel fired steam generator Unit 3 (S-3) began commercial operation in 1966; and, fossil fuel fired steam generator Unit 4 (S-4) began commercial operation in 1970. The permittee reported it operates the following continuous monitors for Unit S-3: SO_2, NOx, CO_2, flow, visible emissions, and temperature.}

Compliance Assurance Monitoring (CAM) *does not apply* to these emissions units.

TO:

Subsection C. This section addresses the following emissions units.

009	Fossil Fuel Steam Generating Unit 3 (S-3), nominally rated at 26.5 MW, 325.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil, with emissions exhausted through a 113 ft. stack
010	Fossil Fuel Steam Generating Unit 4, (S-4), nominally rated at 33 MW, 419.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil, with emissions exhausted through a 115 ft. stack

{Permitting note(s): The emissions units are regulated under Acid Rain, Phase II, Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input, and Rule 62-296.570, F.A.C., NOx RACT, Power Plant Siting Certification No. PA 74-05, and the modified conditions of PA 74-05 ordered September 28, 1987. Fossil fuel fired steam generator Unit 3 (S-3) began commercial operation in 1966; and, fossil fuel fired steam generator Unit 4 (S-4) began commercial operation in 1970. The permittee reported it operates the following continuous monitors for Unit S-3: ~~SO_2~~, NOx, CO_2, flow, visible emissions, and temperature.}

Compliance Assurance Monitoring (CAM) *does not apply* to these emissions units.

Table 2-1 Summary of Compliance Requirements is changed as follows:

FROM:

Table 2-1, Continued

Emissions Unit	Brief Description
009	Fossil Fuel Steam Generating Unit 3 (S-3), nominally rated at 26.5 MW, 325.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil
010	Fossil Fuel Steam Generating Unit 4, (S-4), nominally rated at 33 MW, 419.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil

Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date[1]	Minimum Compliance Test Duration	CMS[2]	See Permit Condition(s)
SO_2	Oil, Natural Gas	Fuel sampling & analysis	Sampling daily, analysis of monthly composite			No[a]	C.8, C.11 & C.12
NOx (EU 009)	Oil, Natural Gas	CEMS	Continuous			Yes	C.13 & C.16
NOx (EU 010)	Oil, Natural Gas	*EPA Test Method 7E* (If CEMS installed see next row)	*Annual*		*3 hours*	No	C.13 & C.15
NOx (EU 010)	Oil, Natural Gas	CEMS (If installed)	Continuous			Yes, if installed for Acid Rain	C.13 & C.15
PM	Oil, Natural Gas	EPA Test Methods 17,5,5B or 5F	Annual		3 hours	No	C.10 & C.14
VE	Oil, Natural Gas	DEP Method 9	Annual		1 hour	Yes	C.14 & E.10

Note for EU 009 & 010:

a A continuous monitor for SO2 is operated by the City for emissions unit 009. Compliance with the fuel sulfur limitation is not via the continuous monitor.

TO:

Table 2-1, Continued

Emissions Unit	Brief Description
009	Fossil Fuel Steam Generating Unit 3 (S-3), nominally rated at 26.5 MW, 325.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil
010	Fossil Fuel Steam Generating Unit 4, (S-4), nominally rated at 33 MW, 419.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil

Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date[1]	Minimum Compliance Test Duration	CMS[2]	See Permit Condition(s)
SO_2	Oil, Natural Gas	Fuel sampling & analysis	Sampling daily, analysis of monthly composite			No[a]	C.8, C.11 & C.12
NOx (EU 009)	Oil, Natural Gas	CEMS	Continuous			Yes	C.13 & C.16
NOx (EU 010)	Oil, Natural Gas	EPA Test Method 7E (If CEMS installed see next row)	Annual		3 hours	No	C.13 & C.15
NOx (EU 010)	Oil, Natural Gas	CEMS (If installed)	Continuous			Yes, if installed for Acid Rain	C.13 & C.15
PM	Oil, Natural Gas	EPA Test Methods 17,5,5B or 5F	Annual		3 hours	No	C.10 & C.14
VE	Oil, Natural Gas	DEP Method 9	Annual		1 hour	Yes	C.14 & E.10

~~Note for EU-009 & 010:~~

~~a- A continuous monitor for SO2 is operated by the City for emissions unit 009. Compliance with the fuel sulfur limitation is not via the continuous monitor.~~

CAM does not apply.

Based on the Title V Air Operation Permit application received April 14, 2005 this facility is not a major source of hazardous air pollutants (HAPs).

Department of Environmental Protection

Jeb Bush
Governor

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

Colleen M. Castille
Secretary

Permittee:
City of Lake Worth Utilities
1900 2nd Avenue North
Lake Worth, FL 33461

Final Permit No. 0990045-004-AV
Facility ID No. 0990045
SIC Nos.: 49, 4931
Project: Title V Air Operation Permit Revision

The purpose of this permit is to revise Title V Air Operation Permit No. 0990045-003-AV, issued on January 1, 2003, for the operation of the Tom G. Smith Power Plant and Lake Worth Water Treatment Plant to reflect the shutdown of the SO2 CEMS on EU 009, Fossil Fuel Steam Generating Unit (S-3). This facility is located at 117 College Street, Lake Worth, FL 33461; UTM Coordinates: Zone 17, 592.8 km East and 2943.7 km North; Latitude: 26° 36' 45" North and Longitude: 80° 04' 04" West.

This Title V air operation permit revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:
Appendix U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix TV-4, Title V Conditions (version dated 2/12/02)
Appendix SS-1, Stack Sampling Facilities (version dated 10/07/96)
Table 297.310-1, Calibration Schedule (version dated 10/07/96)
Phase II Acid Rain Part Renewal Application received 08/23/02
Alternate Sampling Procedure: ASP Number 97-B-01
Scrivener's Order dated July 9, 1997 correcting ASP 97-B-01

Renewal Effective Date: January 1, 2003
Revision Effective Date: September 19, 2005
Renewal Application Due Date: July 5, 2007
Expiration Date: December 31, 2007

Michael G. Cooke, Director
Division of Air Resource Management

TLV/cem

City of Lake Worth Utilities
Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Facility ID No. 0990045
Palm Beach County

Title V Air Operation Permit Revision
Final Permit No. 0990045-004-AV

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Permitting South Section

Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Telephone: 850/488-0114
Fax: 850/922-6979

Compliance Authority:
Palm Beach County Health Department
PO Box 29
West Palm Beach, Florida 33401

Telephone: 561/355-3070
Fax: 561/355-2442

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Permittee:
City of Lake Worth Utilities
1900 2nd Avenue North
Lake Worth, FL 33461

Final Permit No. 0990045-004-AV
Facility ID No. 0990045
SIC Nos.: 49, 4931
Project: Title V Air Operation Permit Revision

The purpose of this permit is to revise Title V Air Operation Permit No. 0990045-003-AV, issued on January 1, 2003, for the operation of the Tom G. Smith Power Plant and Lake Worth Water Treatment Plant to reflect the shutdown of the SO2 CEMS on EU 009, Fossil Fuel Steam Generating Unit (S-3). This facility is located at 117 College Street, Lake Worth, FL 33461; UTM Coordinates: Zone 17, 592.8 km East and 2943.7 km North; Latitude: 26° 36' 45" North and Longitude: 80° 04' 04" West.

This Title V air operation permit revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:
Appendix U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix TV-4, Title V Conditions (version dated 2/12/02)
Appendix SS-1, Stack Sampling Facilities (version dated 10/07/96)
Table 297.310-1, Calibration Schedule (version dated 10/07/96)
Phase II Acid Rain Part Renewal Application received 08/23/02
Alternate Sampling Procedure: ASP Number 97-B-01
Scrivener's Order dated July 9, 1997 correcting ASP 97-B-01

Renewal Effective Date: January 1, 2003
Revision Effective Date: September 19, 2005
Renewal Application Due Date: July 5, 2007
Expiration Date: December 31, 2007

Michael G. Cooke, Director
Division of Air Resource Management

TLV/cem

Section I. Facility Information.

Subsection A. Facility Description.

This facility is an electric power generating plant and an adjacent potable water treatment facility and consists of:

Five 2000 kW diesel engine generators; Fossil Fuel Steam Generating Units 1 (S-1), 3 (S-3) and 4 (S-4); Gas Turbine # 1, (GT-1); and a Combined Cycle Unit, (GT-2/S-5).

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

No activities at the water treatment plant were required to be included in this permit as emissions units.

Based on the Title V permit renewal application received July 5, 2002, this facility is *not* a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U. ID No.	Brief Description
001 to 005	Five 2000 kW diesel engine generators, an MP 36 Power Pack; each diesel generator is a model 567D4 manufactured by GM Electro Motive Division.
007	Fossil Fuel Steam Generating Unit 1 (S-1), nominally rated at 7.5 MW, 111 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil, with emissions exhausted through a 60 ft. stack
009	Fossil Fuel Steam Generating Unit 3 (S-3), nominally rated at 26.5 MW, 325.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil, with emissions exhausted through a 113 ft. stack
010	Fossil Fuel Steam Generating Unit 4, (S-4), nominally rated at 33 MW, 419.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil, with emissions exhausted through a 115 ft. stack
006	Gas Turbine # 1, (GT-1), nominally rated at 30 MW, 435 mmBtu/hr, capable of burning number 2 fuel oil, with emissions exhausted through a 46 ft. stack
011	Combined Cycle Unit, (GT-2/S-5), nominally rated at 29.5 MW, consists of a gas turbine (GT-2) nominally rated at 20 MW and a heat recovery steam generator (S5) nominally rated at 10 MW. GT-2 has a maximum heat input of 317.6 mmBtu/hr, capable of burning any combination of natural gas and number 2 fuel oil, with emissions exhausted through a 75 ft. stack

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History/ID Number Changes
Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements
Statement of Basis

These documents are on file with the permitting authority:
Final Title V Permit Renewal Effective January 1, 2003
Title V Permit Revision Application received April 18, 2005.

These documents are on file with USEPA:
The Responsible Official has certified that the Risk Management Plan was submitted to the RMP Reporting Center.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. Appendix TV-4, Title V Conditions, is a part of this permit.
{Permitting note: Appendix TV-4, Title V Conditions, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

2. **Not Federally Enforceable.** General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard.
Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rule 62-296.320(4)(b)1. & 4, F.A.C.]

4. Prevention of Accidental Releases (Section 112(r) of CAA).
a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.
c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.

Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to:

Department of Community Affairs
Division of Emergency Management
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100
Telephone: 850/413-9921, Fax: 850/488-1739

Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 1515
Lanham-Seabrook, Maryland 20703-1515
Telephone: 301/429-5018

Any required reports to be sent to the National Response Center, should be sent to:

National Response Center
EPA Office of Solid Waste and Emergency Response
USEPA (5305 W)
401 M Street, SW
Washington, D.C. 20460
Telephone: 1/800/424-8802

Send the required annual registration fee using approved forms made payable to:

Cashier
Department of Community Affairs
State Emergency Response Commission
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2149

[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rule 62-213.440(1), F.A.C.]

6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]

7. [Reserved.]

8. **Not Federally Enforceable.** General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. The owner or operator shall:

a. Tightly cover or close all VOC or OS containers when they are not in use.
b. Tightly cover all open tanks which contain VOC or OS when they are not in use.
c. Maintain all pipes, valves, fittings, etc., which handle VOC or OS in good operating condition.
d. As soon as practicable, confine and clean up VOC or OS spills and make sure wastes are placed in closed containers for reuse, recycling or proper disposal.

[Rule 62-296.320(1)(a), F.A.C.]

9. **Not Federally Enforceable.** Unconfined Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

a. When performing sandblasting on fixed plant equipment, the facility shall construct temporary enclosures when practical and necessary, in order to prevent unconfined particulate emissions.
b. Maintenance of paved areas.
c. Regular care of vegetation.
d. Limiting access to plant property by unnecessary vehicles.
e. Bagged chemical products shall be stored in buildings until they are used.
f. Spills of powdered chemical products are cleaned up as soon as practicable.

g. Sweeping paved roads with a wet vacuum truck.
h. Watering, if necessary, the lime backwash residue holding area.

[Rule 62-296.320(4)(c)2., F.A.C.; and Title V Permit Renewal Application received July 5, 2002]

10. When appropriate, any recording, monitoring or reporting requirements that are time-specific shall be in accordance with the effective date of this permit, which defines day one.
[Rule 62-213.440, F.A.C.]

11. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted to the Department and EPA within 60 (sixty) days after the end of the calendar year using DEP Form No. 62-213.900(7), F.A.C.
[Rules 62-213.440(3) and 62-213.900, F.A.C.]

{Permitting Note: This condition implements the requirements of Rules 62-213.440(3)(a)2. & 3., F.A.C. (see Condition **51.** of Appendix TV-4, Title V Conditions).}

12. Submittals. All reports, tests, notifications or other submittals required by this permit shall be submitted to the Palm Beach County Health Department's Air Section, and copies of those submittals shall be sent to the Department of Environmental Protection, Southeast District Office, Air Section. Addresses and telephone numbers are:

Palm Beach County Health Department
Air Section
P.O. Box 29
West Palm Beach, FL 33402-0029
Phone: 561/355-3070

Department of Environmental Protection
Southeast District Office, Air Section
P.O. Box 15425
West Palm Beach, FL 33416
Phone: 561/681-6600

13. Any reports, data, notifications, certifications and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch
61 Forsyth Street
Atlanta, Georgia 30303-8960
Telephone: 404/562-9155
Fax: 404/562-9163

14. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief

formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.
[Rule 62-213.420(4), F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions units.

E.U. ID No.	Brief Description
001 to 005	Five 2000 kW diesel engine generators, an MP 36 Power Pack; each diesel generator is a model 567D4 manufactured by GM Electro Motive Division.

{Permitting note(s): These emissions units are regulated under Rule 62-296.570, F.A.C., NOx RACT.}

Compliance Assurance Monitoring (CAM) *does not apply* to these emissions units.

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

A.1. Methods of Operation - (i.e., Fuels). These emissions units shall burn only diesel fuel.
[Rule 62-213.410, F.A.C.]

Emission Limitations and Standards

{Permitting note: Unless otherwise specified, the averaging time for Specific Condition **A.2.** is based on the specified averaging time of the applicable test method.}

A.2. NOx RACT. Emissions of nitrogen oxides (NOx) from these emissions units shall not exceed 4.75 pounds per million Btu.
[Rule 62-296.570, F.A.C.]

Test Methods and Procedures

A.3. NOx Testing. Compliance with the NOx emission limitation shall be demonstrated by annual emission testing in accordance with EPA Test Method 7E or other EPA- or DEP-approved test method.
[Rule 62-296.570, F.A.C.]

Monitoring of Operations

A.4. Annual Tests Required - NOx. Except as provided in specific conditions **E.6** through **E.8** of this permit, emission testing for nitrogen oxide emissions shall be performed annually, no later than the end of each federal fiscal year (September 30), except for units that are not operating because of scheduled maintenance outages and emergency repairs, which will be tested within thirty days of returning to service. Annual compliance testing while firing oil is not required for units that operated on oil for less than 400 hours in the previous federal fiscal year (ending September 30th).
[Rules 62-4.070(3) and 62-213.440, F.A.C.]

Record Keeping and Reporting Requirements

A.5. The owner or operator shall make and keep records of:

a. The number of hours each emissions unit operates every year; and
b. The total fuel consumption of all five units combined each year.

Such records shall be prepared no later than thirty days after the end of each fiscal year.
[Rule 62-4.070(3), F.A.C.]

Common Conditions

A.6. This emissions unit is also subject to conditions **E.1** through **E.19, except for E.3, E.10, E.11 and E.18,** contained in **Subsection E. Common Conditions.**

Subsection B. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
007	Fossil Fuel Steam Generating Unit 1 (S-1), nominally rated at 7.5 MW, 111 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil, with emissions exhausted through a 60 ft. stack

{Permitting note(s): The emissions unit is regulated under Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with Less than 250 million Btu per Hour Heat Input, and Rule 62-296.570, F.A.C., NOx RACT. Fossil fuel fired steam generator Unit 1 (S-1) began commercial operation in 1961.}

Compliance Assurance Monitoring (CAM) *does not apply* to this emissions unit.

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum operation heat input rate is as follows:

Unit No.	mmBtu/hr Heat Input	Fuel Type
007	111	Natural Gas
	111	No. 6 Fuel Oil

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.406, F.A.C.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

B.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **E.14.**
[Rule 62-297.310(2), F.A.C.]

B.3. Methods of Operation. Fuels.

a. Startup: The only fuel(s) allowed to be burned are any combination of natural gas and/or number 6 fuel oil.

b. Normal: The only fuel(s) allowed to be burned are any combination of natural gas and/or number 6 fuel oil.

[Rule 62-213.410, F.A.C.]

Emission Limitations and Standards

{Permitting note: Unless otherwise specified, the averaging time for Specific Conditions **B.4.** through **B.8.** are based on the specified averaging time of the applicable test method.}

B.4. Visible Emissions. Visible emissions shall not exceed 20 percent opacity, except for one two-minute period per hour during which opacity shall not exceed 40 percent.
[Rule 62-296.406(1), F.A.C.]

B.5. Visible emissions - Soot Blowing and Load Change. Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.
[Rule 62-210.700(3), F.A.C.]

B.6. Particulate Matter. Particulate matter emissions shall be controlled by the firing of natural gas and/or low sulfur content liquid fuel. See specific condition **B.7.**
[Rules 62-4.070(3) and 62-296.406(2), F.A.C.]

B.7. Sulfur Dioxide - Sulfur Content. The No. 6 fuel oil sulfur content shall not exceed 2.25 percent, by weight. See specific condition **B.10.**
[Rules 62-4.070(3) and 62-296.406(3), F.A.C.; BACT for this unit assumed to equal the sulfur limit established by PPSC No. PA 74-05 for units S-3 and S-4]

B.8. NOx RACT. Emissions of nitrogen oxides (NOx) from these emissions units shall not exceed 0.50 pounds per million Btu while firing natural gas or number 6 fuel oil.
[Rule 62-296.570, F.A.C.]

Test Methods and Procedures

B.9. Sulfur Dioxide - Sulfur Content. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by fuel sampling and analysis. See specific conditions **B.7. and B.10.**
[Rules 62-213.440 and 62-296.406(3), F.A.C.]

B.10. Fuel Sampling & Analysis - Sulfur. For this emissions unit, the following fuel sampling and analysis protocol shall be used to demonstrate compliance with the fuel sulfur limitation of specific condition B.7 of this permit:

a. Sample the as-fired fuel oil each day fuel oil is fired.

b. Composite the daily samples and each month determine and record the as-fired fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-94, ASTM D4294-90(95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95 (or latest editions) to analyze a representative sample of the composited as-fired fuel oil.

[Rules 62-4.070(3) and 62-213.440, F.A.C.]

B.11. NOx Testing. Compliance with the NOx emission limitation shall be demonstrated by annual emission testing in accordance with EPA Test Method 7E or other EPA- or DEP-approved test methods.
[Rule 62-296.570, F.A.C.]

Monitoring of Operations

B.12. Annual Tests Required - NOx and VE. Except as provided in specific conditions **E.6** through **E.8** of this permit, emission testing for nitrogen oxide emissions and visible emissions shall be performed annually, no later than the end of each federal fiscal year (September 30), except for units that are not operating because of scheduled maintenance outages and emergency repairs, which will be tested within thirty days of returning to service. Annual compliance testing while firing oil is not required for units that operated on oil for less than 400 hours in the previous federal fiscal year (ending September 30th). [Rules 62-4.070(3) and 62-213.440, F.A.C.]

Common Conditions

B.13. This emissions unit is also subject to conditions **E.1** through **E.19, except for E.2, E.9 and E.18,** contained in **Subsection E. Common Conditions.**

Subsection C. This section addresses the following emissions units.

009	Fossil Fuel Steam Generating Unit 3 (S-3), nominally rated at 26.5 MW, 325.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil, with emissions exhausted through a 113 ft. stack
010	Fossil Fuel Steam Generating Unit 4, (S-4), nominally rated at 33 MW, 419.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil, with emissions exhausted through a 115 ft. stack

{Permitting note(s): The emissions units are regulated under Acid Rain, Phase II, Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input, and Rule 62-296.570, F.A.C., NOx RACT, Power Plant Siting Certification No. PA 74-05, and the modified conditions of PA 74-05 ordered September 28, 1987. Fossil fuel fired steam generator Unit 3 (S-3) began commercial operation in 1966; and, fossil fuel fired steam generator Unit 4 (S-4) began commercial operation in 1970. The permittee reported it operates the following continuous monitors for Unit S-3: NOx, CO_2, flow, visible emissions, and temperature.}

Compliance Assurance Monitoring (CAM) *does not apply* to these emissions units.

The following specific conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity. The maximum operation heat input rates are as follows:

Unit No.	mmBtu/hr Heat Input	Fuel Type
009	325.1	Natural Gas
	325.1	No. 6 Fuel Oil
010	419.1	Natural Gas
	419.1	No. 6 Fuel Oil

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.405, F.A.C.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

C.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **E.14.**
[Rule 62-297.310(2), F.A.C.]

C.3. Methods of Operation. Fuels.

a. Startup: The only fuel(s) allowed to be burned are any combination of natural gas and/or number 6 fuel oil.

b. Normal: The only fuel(s) allowed to be burned are any combination of natural gas and/or number 6 fuel oil.

[Rule 62-213.410, F.A.C.]

Emission Limitations and Standards

{Permitting note: Unless otherwise specified, the averaging time for Specific Conditions **C.4.** through **C.9.** are based on the specified averaging time of the applicable test method.}

C.4. Visible Emissions. Visible emissions shall not exceed 20 percent opacity, except for one two-minute period per hour during which opacity shall not exceed 40 percent. Emissions units governed by this visible emissions limit shall compliance test for particulate matter emissions annually and as otherwise required by Chapter 62-297, F.A.C.
[Rule 62-296.405(1)(a), F.A.C.]

C.5. Visible Emissions - Soot Blowing and Load Change. **(The following paragraph is applicable only to emissions unit 010 (Unit S-4) and only until installation of an operational continuous opacity monitor at Unit S-4.)** Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more.

(The following paragraph is applicable to emissions unit 009 (Unit S-3) and will become applicable to emissions unit 010 (Unit S-4) only upon installation of an operational continuous opacity monitor at Unit S-4.) Visible emissions above 60 percent opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions allowed by this condition.
[Rule 62-210.700(3), F.A.C., Note: Unit S-3 has an operational continuous opacity monitor. Unit S-4 may install an operational continuous opacity monitor in the future, and at that time be allowed visible emissions greater than 60% opacity pursuant to Rule 62-210.700(3), F.A.C., and specific condition C.5 of this permit.]

C.6. Particulate Matter. Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods.
[Rule 62-296.405(1)(b), F.A.C.]

C.7. Particulate Matter - Soot Blowing and Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.
[Rule 62-210.700(3), F.A.C.]

C.8. Sulfur Dioxide - Sulfur Content. The No. 6 fuel oil sulfur content shall not exceed 2.25 percent, by weight. See specific condition **C.11.**
[Rules 62-4.070(3) and 62-213.440, F.A.C., and Power Plant Siting Certification No. PA 74-05]

C.9. NOx RACT. Emissions of nitrogen oxides (NOx) from these emissions units shall not exceed 0.50 pounds per million Btu while firing natural gas or number 6 fuel oil or combination thereof.
[Rule 62-296.570, F.A.C.]

Test Methods and Procedures

C.10. Particulate Matter. The test methods for particulate emissions shall be EPA Methods 17, 5, 5B, or 5F, incorporated by reference in Chapter 62-297, F.A.C. The minimum sample volume shall be 30 dry standard cubic feet. EPA Method 5 may be used with filter temperature no more than 320 degrees Fahrenheit. For EPA Method 17, stack temperature shall be less than 375 degrees Fahrenheit. The owner or operator may use EPA Method 5 to demonstrate compliance. EPA Method 3 or 3A with Orsat analysis shall be used when the oxygen based F-factor, computed according to EPA Method 19, is used in lieu of heat input. Acetone wash shall be used with EPA Method 5 or 17.
[Rules 62-213.440, 62-296.405(1)(e)2., and 62-297.401, F.A.C.]

C.11. Sulfur Dioxide - Sulfur Content. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by fuel sampling and analysis. See specific conditions **C.8. and C.12.**
[Rules 62-213.440 and 62-296.406(3), F.A.C.]

C.12. Fuel Sampling & Analysis - Sulfur. For each emissions unit, the following fuel sampling and analysis protocol shall be used to demonstrate compliance with the the fuel sulfur limitation of specific condition **C.8** of this permit:

a. Sample the as-fired fuel oil each day fuel oil is fired.

b. Composite the daily samples and each month determine and record the as-fired fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-94, ASTM D4294-90(95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95 (or latest editions) to analyze a representative sample of the composited as-fired fuel oil. Each composite sample shall also be analyzed for heating value.

c. Record monthly the amount of each fuel fired, and maintain records of the monthly analyses of the heating value of each fuel, and the percent sulfur content by weight of each fuel, to enable calculations of sulfur dioxide emissions.

[Rules 62-4.070(3) and 62-213.440, F.A.C., and PPSC PA 74-05]

C.13. NOx Testing. Compliance with the NOx emission limitation shall be demonstrated by annual emission testing in accordance with EPA Test Method 7E, for emissions unit 010. If a continuous emission monitoring system (CEMS) for NOx is installed at emissions unit 010, compliance shall then be demonstrated by the CEMS. Compliance with the NOx emission limitation shall be demonstrated by a CEMS for emissions unit 009. See specific conditions **C.15** and **C.16**.
[Rule 62-296.570, F.A.C.]

Monitoring of Operations

C.14. Annual Tests Required - PM and VE. Except as provided in specific conditions **E.6** through **E.8** of this permit, emission testing for particulate matter emissions and visible emissions shall be performed annually, no later than the end of each federal fiscal year (September 30), except for units that are not operating because of scheduled maintenance outages and emergency repairs, which will be tested within thirty days of returning to service.
[Rules 62-4.070(3) and 62-213.440, F.A.C.]

C.15. Annual NOx Tests Required - Unit 4 (S-4, Emissions Unit 010). For emissions unit 010, emission testing for NOx shall be performed annually, no later than the end of each federal fiscal year (September 30), except for units that are not operating because of scheduled maintenance outages and emergency

repairs, which will be tested within thirty days of returning to service. Annual compliance testing while firing oil is not required for units that operated on oil for less than 400 hours in the previous federal fiscal year (ending September 30th).

Should the owner or operator install a continuous emission monitoring system (CEMS) for NOx emissions at emission unit 010, compliance with the NOx limitation shall be demonstrated with the CEMS. Compliance shall be based on a 30-day rolling average. The CEMS shall be properly maintained and operated and shall meet the performance specifications of 40 CFR 60, Appendix B, or 40 CFR 75. The CEMS data shall be maintained on site for inspection by the Department.
[Rules 62-4.070(3), 62-213.410, F.A.C. and 62-296.570(4)(a)3. & 4.]

C.16. NOx CEMS Required - Unit 3 (S-3, Emissions Unit 009). For emissions unit 009, compliance with the NOx limitation shall be demonstrated with a continuous emission monitoring system (CEMS). Compliance shall be based on a 30-day rolling average, excluding periods of startup, shutdown or malfunction as provided by Rule 62-210.700, F.A.C., if the CEMS is properly maintained and operated and meets the performance specifications of 40 CFR 60, Appendix B, or 40 CFR 75. The CEMS data shall be maintained on site for inspection by the Department and need not be submitted to the Department unless specifically requested.

If the CEMS is *not properly maintained and operated, as described in the above paragraph,* compliance with the NOx limitation shall be demonstrated by annual emission testing in accordance with EPA Test Method 7E.
[Rules 62-4.070(3), 62-213.440, F.A.C. and 62-296.570(4)(a)4., and request of applicant]

Common Conditions

C.17. This emissions unit is also subject to conditions **E.1** through **E.19, except for E.2 and E.9,** contained in **Subsection E. Common Conditions.**

Subsection D. This section addresses the following emissions units.

006	Gas Turbine # 1, (GT-1), manufactured by Westinghouse, nominally rated at 30 MW, 435 mmBtu/hr, capable of burning number 2 fuel oil, with emissions exhausted through a 46 ft. stack
011	Combined Cycle Unit, (GT-2/S-5), nominally rated at 29.5 MW, consists of a gas turbine (GT-2) nominally rated at 20 MW and a heat recovery steam generator (S5) nominally rated at 10 MW. GT-2 has a maximum heat input of 317.6 mmBtu/hr, capable of burning any combination of natural gas and number 2 fuel oil, with emissions exhausted through a 75 ft. stack

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required and Rule 62-296.570, F.A.C., NOx RACT. Emissions unit 011 is also regulated under Power Plant Siting Certification No. PA 74-05, and the modified conditions of PA 74-05 ordered September 28, 1987. Based on information submitted by the applicant in the Title V application, these emissions units are *not subject* to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines. Each combustion turbine has its own stack. Emissions unit 006 (Unit GT-1) began commercial operation in 1976; and, emissions unit 011 (Unit GT-2/S-5) began commercial operation in 1978.}

Compliance Assurance Monitoring (CAM) *does not apply* to these emissions units.

The following specific conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity. The maximum operation heat input rates are as follows:

Unit No.	mmBtu/hr Heat Input	Fuel Type
006	435	No. 2 Fuel Oil
011	317.6	Natural Gas
	317.6	No. 2 Fuel Oil

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

D.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **E.14.**
[Rule 62-297.310(2), F.A.C.]

D.3. Methods of Operation - Fuels.

a. Emissions unit 006: Only number 2 fuel oil shall be fired in the combustion turbine.
b. Emissions unit 011: Only any combination of natural gas and/or number 2 fuel oil shall be fired in the combustion turbine.

[Rule 62-213.410, F.A.C.]

Emission Limitations and Standards

{Permitting note: Unless otherwise specified, the averaging times for Specific Conditions **D.4.** and **D.5.** are based on the specified averaging time of the applicable test method.}

D.4. Sulfur Dioxide - Sulfur Content - Emissions Unit 011. For emissions unit 011 (Unit GT-2/S-5), the No. 2 fuel oil sulfur content shall not exceed 0.35 percent, by weight. See specific condition **D.6.**
[Rules 62-4.070(3) and 62-213.440, F.A.C., and Power Plant Siting Certification No. PA 74-05]

D.5. NOx RACT. Emissions of nitrogen oxides (NOx) from these emissions units shall not exceed 0.50 pounds per million Btu while firing natural gas and 0.90 pounds per million Btu while firing number 2 fuel oil.
[Rule 62-296.570, F.A.C.]

Test Methods and Procedures

D.6. Sulfur Dioxide - Sulfur Content - Emissions Unit 011. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by fuel sampling and analysis. See specific conditions **D.4. and D.7.**
[Rules 62-213.440 and 62-296.406(3), F.A.C.]

D.7. Fuel Sampling & Analysis - Sulfur - Emissions Unit 011. For each emissions unit, the following fuel sampling and analysis protocol shall be used to demonstrate compliance with the fuel sulfur limitation of specific condition **D.4** of this permit:

a. Sample the as-fired fuel oil each day fuel oil is fired.
b. Composite the daily samples and each month determine and record the as-fired fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-94, ASTM D4294-90(95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95 (or latest editions) to analyze a representative sample of the composited as-fired fuel oil. Each composite sample shall also be analyzed for heating value.
c. Record monthly the amount of each fuel fired, and maintain records of the monthly analyses of the heating value of each fuel, and the percent sulfur content by weight of each fuel, to enable calculations of sulfur dioxide emissions.

[Rules 62-4.070(3) and 62-213.440, F.A.C., and PPSC PA 74-05]

D.8. NOx Testing. Compliance with the NOx emission limitation shall be demonstrated by annual emission testing in accordance with EPA Test Method 7E.
[Rule 62-296.570, F.A.C.]

Monitoring of Operations

D.9. Annual Tests Required - NOx and VE. Except as provided in specific conditions **E.6** through **E.8** of this permit, emission testing for nitrogen oxide emissions for Unit 006 and 011 and visible emissions for Unit 011 shall be performed annually, no later than the end of each federal fiscal year (September 30), except for units that are not operating because of scheduled maintenance outages and emergency

repairs, which will be tested within thirty days of returning to service. Annual compliance testing while firing oil is not required for units that operated on oil for less than 400 hours in the previous federal fiscal year (ending September 30th).
[Rules 62-4.070(3) and 62-213.440, F.A.C.]

D.10. These emissions units are also subject to conditions **E.1** through **E.19, except for E.3, E.10, E.11 and E.18,** contained in **Subsection E. Common Conditions.**

Subsection E. Common Conditions.

E.U. ID No.	Brief Description
001 to 005	Five 2000 kW diesel engine generators
007	Fossil Fuel Steam Generating Unit 1 (S-1)
009	Fossil Fuel Steam Generating Unit 3 (S-3)
010	Fossil Fuel Steam Generating Unit 4, (S-4)
006	Gas Turbine # 1, (GT-1)
011	Combined Cycle Unit, (GT-2/S-5)

The following conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

E.1. Hours of Operation. The emissions units may operate continuously, i.e., 8,760 hours/year.
[Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Excess Emissions

E.2. (This condition is applicable only to emissions units 001 - 005, 006 and 011.) Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided (1) that best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

E.3. (This condition is applicable only to emissions units 007, 009 and 010.) Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

Excess emissions resulting from malfunction shall be permitted provided (1) that best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1) & (2), F.A.C.]

E.4. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

E.5. Determination of Process Variables.
(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.
(c) Heat input rate shall be determined by average fuel use during testing (to be determined by fuel flow meters or fuel tank measurements) and the latest fuel analysis available from the vendor or operator (for Btu content of the fuel used).
[Rules 62-297.310(5) and 62-213.440, F.A.C.]

E.6. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
(a) General Compliance Testing.
2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.
3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
a. Did not operate; or
b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
a. Visible emissions, if there is an applicable standard;
b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.]

E.7. When PM Tests Not Required. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units while burning:

a. only gaseous fuel(s); or
b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
c. only liquid fuel(s) for less than 400 hours per year.

[Rules 62-297.310(7)(a)3. & 5., F.A.C.; and, ASP Number 97-B-01.]

E.8. When VE Tests Not Required. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:

a. only gaseous fuel(s); or
b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-4.070(3), F.A.C.]

Test Methods and Procedures

{Permitting Note: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

E.9. (This condition is applicable only to emissions units 001 - 005, 006 and 011.) Visible Emissions - Turbines, Diesel Engine Generators. The test method for visible emissions for emissions units 006 (GT-1), 011 (GT-2/S-5), and 001 through 005 (diesel engine generators) shall be EPA Method 9, adopted and incorporated by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C.

[Rules 62-204.800, 62-296.320(4)(b)4.a. and 62-297.401, F.A.C., and modified conditions of PA 74-05 ordered September 28, 1987]

E.10. (This condition is applicable only to emissions units 007, 009 and 010.) Visible Emissions - Boilers. The test method for visible emissions for emissions units 007 (S-1), 009 (S-3) and 010 (S-4) shall be DEP Method 9, incorporated in Chapter 62-297, F.A.C. A transmissometer may be used and calibrated according to Rule 62-297.520, F.A.C. See specific condition **E.11.**
[Rule 62-296.405(1)(e)1., F.A.C.]

E.11. (This condition is applicable only to emissions units 007, 009 and 010.) DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:
    a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
    b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value.
[Rule 62-297.401, F.A.C.]

E.12. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.]

E.13. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.]

E.14. Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operating at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2) & (2)(b), F.A.C.]

E.15. Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.]

E.16. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit. Temporary stack sampling facilities under Rule 62-297.310(6)(b), F.A.C. may be used in lieu of permanent facilities.
[Rule 62-297.310(6), F.A.C.]

Recordkeeping and Reporting Requirements

E.17. Malfunctions - Notification. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Palm Beach County Health Department's Air Section in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Palm Beach County Health Department's Air Section.
[Rule 62-210.700(6), F.A.C.]

E.18. (This condition is applicable only to emissions units 009 and 010.) Excess Emissions - Report. Submit to the Palm Beach County Health Department's Air Section a written report of emissions in excess of emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years.
[Rules 62-213.440 and 62-296.405(1)(g), F.A.C.]

E.19. Test Reports.
(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Palm Beach County Health Department's Air Section on the results of each such test.
(b) The required test report shall be filed with the Palm Beach County Health Department's Air Section as soon as practical but no later than 45 days after the last sampling run of each test is completed.
(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Palm Beach County Health Department's Air Section to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.

11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

Section IV. This section is the Acid Rain Part.

Operated by: City of Lake Worth Utilities **ORIS code:** **0673**

Subsection A. This subsection addresses Acid Rain, Phase II.

The emissions unit(s) listed below are regulated under Acid Rain, Phase II.

E.U. ID No.	Brief Description
009	Fossil Fuel Steam Generator, Unit 3, (S-3)
010	Fossil Fuel Steam Generator, Unit 4, (S-4)

1. The Phase II permit application(s) submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain unit(s) must comply with the standard requirements and special provisions set forth in the application(s) listed:

a. DEP Form No. 62-210.900(1)(a), signed by the Designated Representative on 08/21/02.

[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

2. Sulfur dioxide (SO_2) allowance allocations for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	Year	2003	2004	2005	2006	2007
009	S-3	SO2 allowances, under Table 2 of 40 CFR Part 73	89*	89*	89*	89*	89*
010	S-4	SO2 allowances, under Table 2 of 40 CFR Part 73	0*	0*	0*	0*	0*

*The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2 of 40 CFR 73.

3. Emission Allowances. Emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

1. No permit revision shall be required for increase in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
3. Allowances shall be accounted for under the Federal Acid Rain Program.

[Rule 62-213.440(1)(c), F.A.C.]

4. Where an applicable requirement of the Act is more stringent than applicable regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.
[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200, F.A.C., Definitions – Applicable Requirements.]

Appendix I-1, List of Insignificant Emissions Units and/or Activities

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, or that meet the criteria specified in Rule 62-210.300(3)(b)1., F.A.C., Generic Emissions Unit Exemption, are exempt from the permitting requirements of Chapters 62-210, 62-212 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rules 62-210.300(3)(a) and (b)1., F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities
1. Dust collector hopper discharge valve for Unit S-3.
2. Liquid propane gas emergency generator.
3. Portable electrical generators that can be moved by hand from one location to another.
4. Air compressors and pneumatically operated equipment, including hand tools.
5. Storage tanks, vessels, and containers that hold or store liquid substances that will not have the potential to emit VOC or HAPs greater than the de minimis quantities.
6. Janitorial services and consumer use of janitorial products.

Appendix H-1, Permit History/ID Number Changes

Permit History (for tracking purposes):

E.U. ID No.	Description	Permit No.	Issue Date	Expiration Date	Revised Date(s)
001	Diesel Generator #1 Peaking Unit	AO 50-172357	01/18/90	07/17/94	
002	Diesel Generator #2 Peaking Unit	AO 50-172357	01/18/90	07/17/94	
003	Diesel Generator #3 Peaking Unit	AO 50-172357	01/18/90	07/17/94	
004	Diesel Generator #4 Peaking Unit	AO 50-172357	01/18/90	07/17/94	
005	Diesel Generator #5 Peaking Unit	AO 50-172357	01/18/90	07/17/94	
006	Combustion Gas Turbine #1 (GT-1)	AO 50-219177 AC 50-2168A AC 50-2168	11/06/92 09/10/76 09/28/73	10/30/97 09/01/77 03/01/75	
007	Fossil Fuel Steam Generator Unit #1 (S-1)	AO 50-169444	01/31/96	09/15/96	
008	Fossil Fuel Steam Generator Unit #2 (S-2)*				
009	Fossil Fuel Steam Generator Unit #3 (S-3)	AO 50-169444 PA - 74-05	01/31/96 05/18/76	09/15/96	 09/28/87 03/27/96
010	Fossil Fuel Steam Generator Unit #4 (S-4)	AO 50-169444 PA - 74-05	01/31/96 05/18/76	09/15/96	 09/28/87 03/27/96
011	Combined Cycle Gas Turbine (GT-2/S-5)	PA - 74-05	05/18/76		09/28/87 03/27/96
001 - 005, 006, 007, 009, 010	Diesel engine generators #1 - 5 GT-1 S-1 S-3 S-4	0990045-001-AO (amendment of AO 50-169444, AO 50-172357, AO 50-219177, for NOx RACT)	01/31/96		
	All of the above.	0990045-002-AV	01/01/98	12/31/02	
	All of the above.	0990045-003-AV	01/01/03	12/31/07	

ID Number Changes (for tracking purposes):

From: **Facility ID No.:** 50PMB500045

To: **Facility ID No.:** 0990045

* Unit S-2 is not in service. Operation of this unit is not permitted by this permit.

Appendix U-1, List of Unregulated Emissions Units and/or Activities

Unregulated Emissions Units and/or Activities. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither 'regulated emissions units' nor 'insignificant emissions units'.

E.U. ID No.	Brief Description of Emissions Units and/or Activity
012	Fuel oil storage tanks (tanks 10 & 11, both 20,134 gallons capacity, and tank 12, 140,785 gallons capacity) subject to NSPS, Subpart Kb.*
013	Fuel oil storage tanks (tanks 3, 4, 5, 6, and 8), lube oil tanks, fittings and pumps.

*The owner or operator shall keep readily accessible records showing the dimension of each storage vessel (tank) and an analysis showing the capacity of each storage vessel (tank), and shall retain the records as long as each tank remains at the facility.

Table 1-1, Summary of Air Pollutant Emission Standards

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Emissions Unit	Brief Description
001 - 005	Five 2000 kW diesel engine generators

			Allowable Emissions			Equivalent Emissions[1]			
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lbs./hour	TPY	lbs./hour	TPY	Regulatory Citations	See Permit Condition(s)
VE	Diesel Fuel	8760	20% opacity					Rule 62-296.320(4)(b), F.A.C.	Section II, Condition 3
NOx	Diesel Fuel	8760	4.75 lb/mmBtu			99.85	436.91	Rules 62-296.570., F.A.C.	A.2

Note for EU 001 - 005: Equivalent emissions are listed for each diesel generator.

Table 1-1, Continued

Emissions Unit	Brief Description
007	Fossil Fuel Steam Generating Unit 1 (S-1), nominally rated at 7.5 MW, 111 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil

			Allowable Emissions					
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lbs./hour	TPY	[redacted]	Regulatory Citations	See Permit Condition(s)
VE Steady State	Oil, Natural Gas	8760	20% opacity, except for 40% for 2 min. each hour				Rule 62-296.406(1), F.A.C.	B.4
VE Soot Blowing or Load Change	Oil, Natural Gas	8760	60% opacity				Rule 62-210.700(3), F.A.C.	B.5
SO_2 (& PM)	Oil, Natural Gas	8760	2.25% S by weight, fuel oil				Rules 62-4.070(3) & 296.406(3)., F.A.C.	B.7
NOx	Oil, Natural Gas	8760	0.5 lb/mmBtu				Rules 62-296.570, F.A.C.	B.8

* Equivalent emissions are for SO_2 emissions firing fuel oil.

Table 1-1, Continued

Emissions Unit	Brief Description
009	Fossil Fuel Steam Generating Unit 3 (S-3), nominally rated at 26.5 MW, 325.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil
010	Fossil Fuel Steam Generating Unit 4, (S-4), nominally rated at 33 MW, 419.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil

			Allowable Emissions			Equivalent Emissions			
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lbs./hour	TPY	lbs./hour	TPY	Regulatory Citations	See Permit Condition(s)
VE Steady State	Oil, Natural Gas	8760	20% opacity, except for 40% for 2 min. each hour					Rule 62-296.405(1)(a), F.A.C.	C.4
VE Soot Blowing or Load Change	Oil, Natural Gas	8760	60 % opacity (>60% opacity for not more than 4, six-minute periods per hour during 3 hours allowed for sootblowing/load change)					Rule 62-210.700(3), F.A.C.	C.5
PM Steady State	Oil, Natural Gas	8760	0.1 lb/mmBtu			33 (EU 009) 42 (EU 010)	142 (EU 009) 184 (EU 010)	Rule 62-296.405(1)(b), F.A.C.	C.6
PM Soot Blowing or Load Change	Oil, Natural Gas	8760	0.3 lb/mmBtu			99 (EU 009) 126 (EU 010)	426 (EU 009) 552 (EU 010)	Rule 62-210.700(3), F.A.C.	C.7

Table 1-1, Continued, Emissions Units 009 & 010

			Allowable Emissions			Equivalent Emissions			
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lbs./hour	TPY	lbs./hour	TPY	Regulatory Citations	See Permit Condition(s)
SO_2	Oil, Natural Gas	8760	2.25% S by weight, fuel oil			832 (EU 009) (oil) 1072 (EU 010) (oil)	1072 (EU 009) (oil) 4695 (EU 010) (oil)	Rule 62-213.440, F.A.C. & PPSC No. PA 74-05	C.8
NOx	Oil, Natural Gas	8760	0.5 lb/mmBtu			163 (EU 009) 210 (EU 010)	712 (EU 009) 918 (EU 010)	Rules 62-296.570, F.A.C.	C.9

Table 1-1, Continued

Emissions Unit	Brief Description
006	Gas Turbine # 1, (GT-1), nominally rated at 30 MW, 435 mmBtu/hr, capable of burning number 2 fuel oil
011	Combined Cycle Unit, (GT-2/S-5), nominally rated at 29.5 MW, consists of a gas turbine (GT-2) nominally rated at 20 MW and a heat recovery steam generator (S5) nominally rated at 10 MW. GT-2 has a maximum heat input of 317.6 mmBtu/hr, capable of burning any combination of natural gas and number 2 fuel oil

			Allowable Emissions			Equivalent Emissions			
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lbs./hour	TPY	lbs./hour	TPY	Regulatory Citations	See Permit Condition(s)
VE	Oil[a], Natural Gas[b]	8760	20% Opacity					Rule 62-296.320(4)(b), F.A.C.	Section II, Condition 3
SO_2 (EU 011 only)	Oil, Natural Gas	8760	0.35% S by weight, fuel oil			109 (oil)	478 (oil)	Rule 62-213.440, F.A.C. & PPSC No. PA 74-05	D.4
NOx (EU 006)	Oil[a], Natural Gas[b]	8760	0.90 lb/mmBtu (fuel oil) 0.50 lb/mmBtu (natural gas)			392 218	1715 953	Rules 62-570, F.A.C.	D.5
NOx (EU 011)	Oil[a], Natural Gas[b]	8760	0.90 lb/mmBtu (fuel oil) 0.50 lb/mmBtu (natural gas)			286 159	1252 696	Rules 62-570, F.A.C.	D.5

a Number 2 fuel oil may be fired in emissions unit 006 or 011.
b Natural gas may be fired in emissions unit 011.

Table 1-1, Continued

Emissions Unit	Brief Description
012	Fuel oil storage tanks (tanks 10 & 11, both 20,134 gallons capacity, and tank 12, 140,785 gallons capacity) subject to NSPS, Subpart Kb

			Allowable Emissions			Equivalent Emissions[1]			
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lbs./hour	TPY	lbs./hour	TPY	Regulatory Citations	See Permit Condition(s)
None		8760	No emission limits - record keeping only						F.2, F.3

Notes for all tables:

[1] The "Equivalent Emissions" listed are for informational purposes only.

Table 2-1, Summary of Compliance Requirements

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

Emissions Unit	Brief Description
001 to 005	Five 2000 kW diesel engine generators

Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date[1]	Minimum Compliance Test Duration	CMS[2]	See Permit Condition(s)
NOx	Diesel Fuel	EPA Test Method 7E	Annual		3 hours	No	A.3 & A.4
VE	Diesel Fuel	EPA Method 9	Annual		30 min.	No	A.4 & E.9

Emissions Unit	Brief Description
007	Fossil Fuel Steam Generating Unit 1 (S-1), nominally rated at 7.5 MW, 111 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil

Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date[1]	Minimum Compliance Test Duration	CMS[2]	See Permit Condition(s)
SO_2	Oil, Natural Gas	Fuel sampling & analysis	Sampling daily, analysis of monthly composite			No	B.7, B9 & B.10
NOx	Oil, Natural Gas	EPA Test Method 7E	Annual		3 hours	No	B.11 & B.12
VE	Oil, Natural Gas	DEP Method 9	Annual		1 hour	No	B.12 & E.10

Table 2-1, Continued

Emissions Unit	Brief Description
009	Fossil Fuel Steam Generating Unit 3 (S-3), nominally rated at 26.5 MW, 325.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil
010	Fossil Fuel Steam Generating Unit 4, (S-4), nominally rated at 33 MW, 419.1 mmBtu/hr, capable of burning any combination of natural gas and number 6 fuel oil

Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date[1]	Minimum Compliance Test Duration	CMS[2]	See Permit Condition(s)
SO_2	Oil, Natural Gas	Fuel sampling & analysis	Sampling daily, analysis of monthly composite			No	C.8, C.11 & C.12
NOx (EU 009)	Oil, Natural Gas	CEMS	Continuous			Yes	C.13 & C.16
NOx (EU 010)	Oil, Natural Gas	EPA Test Method 7E (If CEMS installed see next row)	Annual		3 hours	No	C.13 & C.15
NOx (EU 010)	Oil, Natural Gas	CEMS (If installed)	Continuous			Yes, if installed for Acid Rain	C.13 & C.15
PM	Oil, Natural Gas	EPA Test Methods 17,5,5B or 5F	Annual		3 hours	No	C.10 & C.14
VE	Oil, Natural Gas	DEP Method 9	Annual		1 hour	Yes	C.14 & E.10

Table 2-1, Continued

Emissions Unit	Brief Description
006	Gas Turbine # 1, (GT-1), nominally rated at 30 MW, 435 mmBtu/hr, capable of burning number 2 fuel oil
011	Combined Cycle Unit, (GT-2/S-5), nominally rated at 29.5 MW, consists of a gas turbine (GT-2) nominally rated at 20 MW and a heat recovery steam generator (S5) nominally rated at 10 MW. GT-2 has a maximum heat input of 317.6 mmBtu/hr, capable of burning any combination of natural gas and number 2 fuel oil

Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date[1]	Minimum Compliance Test Duration	CMS[2]	See Permit Condition(s)
SO_2 (Emissions Unit 011 only)	Oil, Natural Gas	Fuel sampling & analysis	Sampling daily, analysis of monthly composite			No	D.4, D.6 & D.7
NOx	Oil, Natural Gas	EPA Test Method 7E	Annual		3 hours	No	D.8 & D.9
VE	Oil, Natural Gas	EPA Method 9	Annual		1 hour	No	D.9 & E.9

Table 2-1, Continued

Emissions Unit	Brief Description
012	Fuel oil storage tanks (tanks 10 & 11, both 20,134 gallons capacity, and tank 12, 140,785 gallons capacity) subject to NSPS, Subpart Kb

Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date[1]	Minimum Compliance Test Duration	CMS[2]	See Permit Condition(s)
Capacity		Record keeping					F.2 & F.3

Notes for all tables:

[1] Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.
[2] CMS = continuous monitoring system

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

[X] 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).

[ ] 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.

[ ] 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.

2. Description of Emissions Unit Addressed in this Section:
Fossil Fuel Steam Generating Unit 3 (S-3)

3. Emissions Unit Identification Number: **009**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**1966**	**49**	[X] Yes [ ] No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: **26.5** MW

11. Emissions Unit Comment:

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:
2. Control Device or Method Code(s):

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: **325.1** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: hours/day weeks/year	days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **Fossil Fuel Steam Generating Unit #3 (S-3)**	2. Emission Point Type Code: **1**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: **N/A**		
5. Discharge Type Code: **V**	6. Stack Height: **113** feet	7. Exit Diameter: **7** feet
8. Exit Temperature: **Gas: 293** °F **Oil: 298** °F	9. Actual Volumetric Flow Rate: **Gas:118,719** acfm **Oil: 121,338** 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): **592.8** North (km): **2943.7**	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Natural Gas**		
2. Source Classification Code (SCC): **1-01-006-01**	3. SCC Units: **mmcf**	
4. Maximum Hourly Rate: **0.317**	5. Maximum Annual Rate: **2,773**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,027**
10. Segment Comment:		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **No.6 Fuel Oil**		
2. Source Classification Code (SCC): **1-01-004-05**	3. SCC Units: **1,000 gallons burned**	
4. Maximum Hourly Rate: **2.2**	5. Maximum Annual Rate: **19,432.1**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **2.3**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **146.6**
10. Segment Comment:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO_2	---	---	EL
NO_x	---	---	EL
PM	---	---	EL
CO	---	---	NS
VOC	---	---	NS
PM_{10}	---	---	NS

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **784** lb/hour **3,432** tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **157 lb SO_2 per 1,000 gal Oil** Reference: **EPA AP-42 Table 1.3-2 Criteria Pollutant Emission Factors for Uncontrolled Fuel Oil Combustion**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

(157 lb SO_2/1,000 gal Oil x 2.25% S x 19,432.13 x 1,000 gal Oil per year)/2,000 lb/ton

11. Potential, Fugitive, and Actual Emissions Comment:

Potential emissions based on maximum firing rate, 8,760 hr/yr and the minimum oil heating value from 1992 through 2002.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **2.25% Sulfur**	4. Equivalent Allowable Emissions: **748** lb/hour **3,432** tons/year
5. Method of Compliance: **As-Fired fuel oil will be sampled each day oil is fired.** **Composite fuel analysis reports conducted monthly.** **SO_2 emissions will be calculated stoichiometrically per Specific Condition C.12.**	
6. Allowable Emissions Comment (Description of Operating Method): **SO_2 emissions obtained from 40 CFR 75, Appendix D procedures may be used in lieu of stoichiometrically calculating emissions.**	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **162.6** lb/hour **712** tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.5 lb NO_x per mmBtu** Reference: **NO_x RACT Rule**	7. Emissions Method Code: **1**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Potential emissions based on oil firing at 325.1 MMBtu/hr
(0.5 lb NO_x per mmBtu Oil x 2,847,876 mmBtu/yr) / 2,000 lb/ton

11. Potential, Fugitive, and Actual Emissions Comment:

Potential emissions based on maximum firing rate and 8,760 hr/yr.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.5 lb NO_x per mmBtu**	4. Equivalent Allowable Emissions: **162.6** lb/hour **712** tons/year
5. Method of Compliance: **CEMS 30-day rolling average**	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **PM**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **97.5** lb/hour **178** tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.3 lb/MMBtu Soot blowing and 0.1 lb/MMBtu normal operation** Reference:	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Potential emissions based on oil firing and up to 3 hours in a 24-hour period of sootblowing and 21 hours of normal operation on a daily basis.

[(0.3 lb/MMBtu)(325.1 MMBtu/hr)(3/24) + (0.1 lb/MMBtu)(325.1 MMBtu/hr)(21/24)]*(8760 hr/yr)(ton/2000 lb)=178 TPY

11. Potential, Fugitive, and Actual Emissions Comment:

Potential emissions based on maximum firing rate and 8,760 hr/yr.

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.1 lb per mmBtu/ 0.3 lb per MMBtu**	4. Equivalent Allowable Emissions: **97.5** lb/hour **178** tons/year
5. Method of Compliance: **Test required only if unit operation on oil, exclusive of startup, exceeds 400 hr/yr.**	
6. Allowable Emissions Comment (Description of Operating Method): **Rule 62-296.405(1)(b), 62-210.700(3)**	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **2**

1. Visible Emissions Subtype: **VE**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20 %** Exceptional Conditions: **40 %** Maximum Period of Excess Opacity Allowed: **2** min/hour	
4. Method of Compliance: **Compliance Test Method 9 conducted annually when burning liquid fuels for 400 or more hours per year. Testing conducted using the fuel and/or process input which are expected to result in the highest emissions and within 10 percent of the rated capacity of the source.**	
5. Visible Emissions Comment: **Rule 62-296.405(1)(a)**	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **2** of **2**

1. Visible Emissions Subtype: **VE**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **60 %** Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: **4 six-min periods per 3 hours** min/hour	
4. Method of Compliance: **Compliance Test Method 9 conducted annually when burning liquid fuels for 400 or more hours per year.**	
5. Visible Emissions Comment: **Rule 62-210.700(3)**	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor 1 of 3

1. Parameter Code: NO_x	2. Pollutant(s):
3. CMS Requirement: ☒ Rule ☐ Other	
4. Monitor Information... Manufacturer: **TECO/Spectrum Systems** Model Number: **42D** Serial Number: **42D-48739-281**	
5. Installation Date: **12 DEC 1994**	6. Performance Specification Test Date: **20 DEC 1994**
7. Continuous Monitor Comment: **Rule 62-214, F.A.C.**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor 2 of 3

1. Parameter Code: CO_2	2. Pollutant(s):
3. CMS Requirement: ☒ Rule ☐ Other	
4. Monitor Information... Manufacturer: **TECO/Spectrum Systems** Model Number: **42D** Serial Number: **42D-48739-281**	
5. Installation Date: **12 DEC 1994**	6. Performance Specification Test Date: **20 DEC 1994**
7. Continuous Monitor Comment: **Rule 62-214, F.A.C.**	

H. CONTINUOUS MONITOR INFORMATION (CONTINUED)

Complete if this emissions unit is or would be subject to continuous monitoring.

Continuous Monitoring System: Continuous Monitor **3** of **3**

1. Parameter Code: **VE**	2. Pollutant(s):
3. CMS Requirement:	☒ Rule ☐ Other
4. Monitor Information... Manufacturer: **United Sciences/Spectrum Systems** Model Number: **500C** Serial Number: **0394853**	
5. Installation Date: **12 DEC 1994**	6. Performance Specification Test Date: **20 DEC 1994**
7. Continuous Monitor Comment: **Rule 62-214, F.A.C.**	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: **LW-EU2-I1** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: **LW-EU2-I2** [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [ ] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [x] Not Applicable

6. Compliance Demonstration Reports/Records
   [x] Attached, Document ID: **LW-EU2-I6**
   Test Date(s)/Pollutant(s) Tested: **May 2007. NOx RATA test.**
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   [ ] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [x] Not Applicable

Additional Requirements for Air Construction Permit Applications

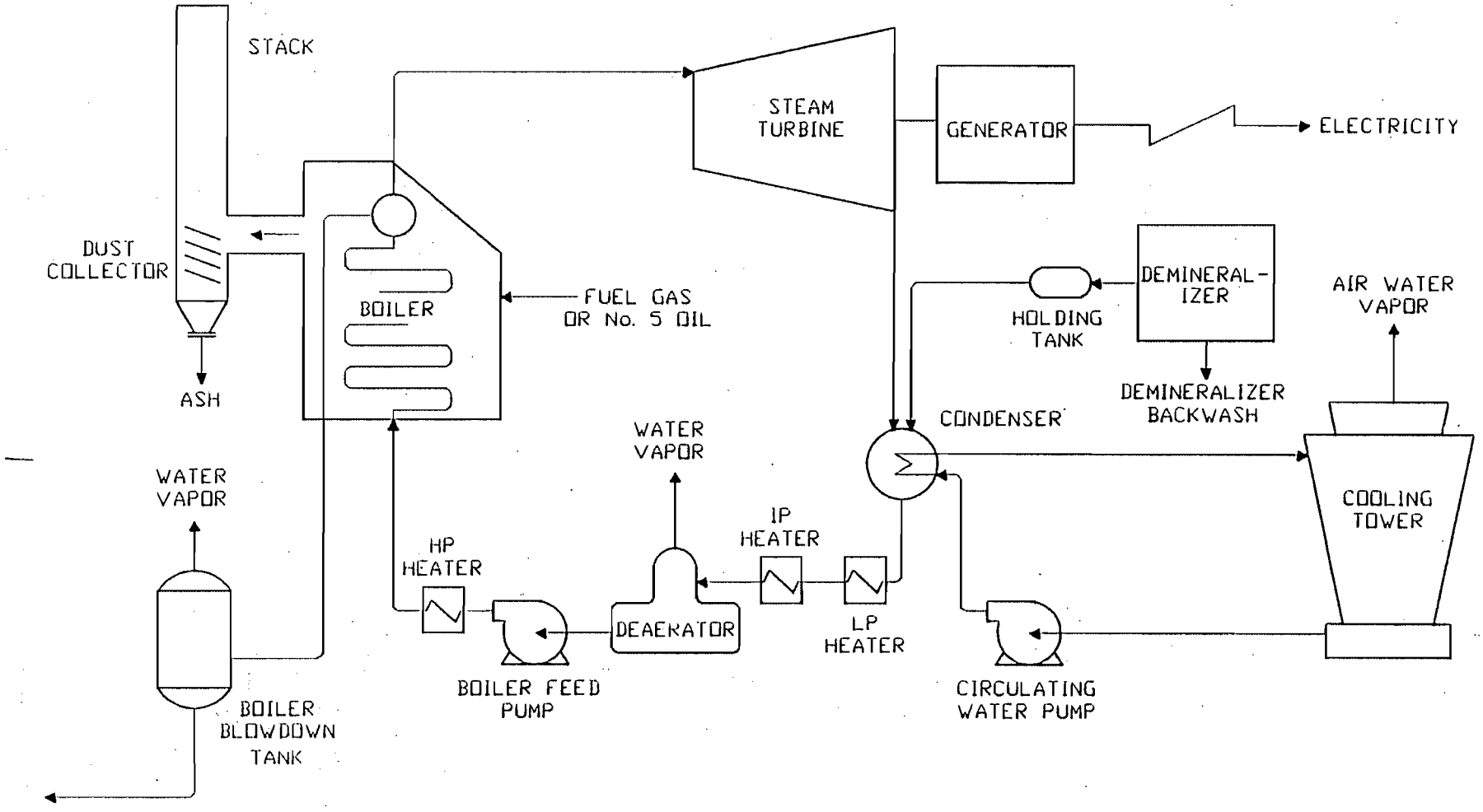
1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **LW-EU1-IV1**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   ☒ Certificate of Representation (EPA Form No. 7610-1)
   ☒ Copy Attached, Document ID:
   ☒ Acid Rain Part (Form No. 62-210.900(1)(a))
   ☒ Attached, Document ID: **LW-EU2-IV5** ☐ Previously Submitted, Date: _____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Not Applicable

Additional Requirements Comment

Attachment LW-EU2-I1
Process Flow Diagram



Tom G. Smith Power Plant Title V Emissions - S-3 Unit 3

Attachment LW-EU3-I1
Process Flow Diagram
Lake Worth Utilities - City of Lake Worth, Florida

Source: Golder, 2002.

Golder Associates

Attachment LW-EU2-I2
Fuel Analysis or Specification

CITY OF LAKE WORTH

1900 2ND AVENUE NORTH
LAKE WORTH, FLORIDA 33461-4298

UTILITIES DEPARTMENT
POWER RESOURCES

(561) 586-1703
FAX (561) 586-1759

April 29, 2002

Mr. Laxmana Tallam
Supervisor of Permitting, Compliance & Enforcement
Florida Department of Environmental Protection
Post Office Box 15425
400 North Congress Avenue
West Palm Beach, Florida 33416

Subject: **City of Lake Worth Utilities**
Quarterly Fuel Oil Analysis Reports
First Quarter 2002 (Jan- Feb - Mar)

Dear Mr. Tallam:

Please find attached our quarterly fuel oil analysis as required by our operating permit. Samples reported below have been collected from a composite sample from the on site oil storage facility.

On site quarterly sample:

Type	Date	%S	Note
No.6	04/01/02	1.97	On site quarterly sample
No.2	04/01/02	0.0390	On site quarterly sample

The results indicate the oil is within our permit limits of 0.35% sulfur for No. 2 oil and 2.25% sulfur for No. 6 oil. If you need more information, please do hesitate to call me at 561.533.7379 or email at mridge@lakeworth.net.

Sincerely,
CITY OF LAKE WORTH UTILITIES

Mike Ridge
Environmental/ Performance Specialist

Attachments

cc: A.J. Satyal, Environmental Manager, Palm Beach County Health Unit
Larry Baker, Power Resources Superintendent
Margaret Johnstone, Environmental Compliance Officer
Joe Brockway, Results Supervisor

SAYBOLT LP.
2610 So. Federal Highway
Fort Lauderdale, FL. 33316

LABORATORY NO.: 0484

CUSTOMER
REF. NO(S): #129018/

LABORATORY ANALYSIS REPORT

DATE: 04/08/02
INVOICE NO:

DESCRIPTION

- **Sample designated as:**
  #6 FUEL OIL
- **Identifying Marks:**
  SUBMITTED QUARTERLY
  SAMPLE (04/01/02)
  CITY POWER PLANT
  LAKE WORTH, FLORDA
- **Submitted by:**
  CITY OF LAKE WORTH
- **Client:**
  CITY OF LAKE WORTH

SAMPLES SHALL BE RETAINED BY SAYBOLT INC. FOR FORTY-FIVE (45) DAYS UNLESS OTHERWISE REQUESTED IN WRITING.

NOTES

- This laboratory report may not be published or used except in full. It shall not be used in connection with any form of advertising unless written consent is received from an officer of Saybolt Inc.
- Results were based on analysis made at the time samples were received at the laboratory.
- Sample nomenclature is designated by the customer.

ANALYSIS

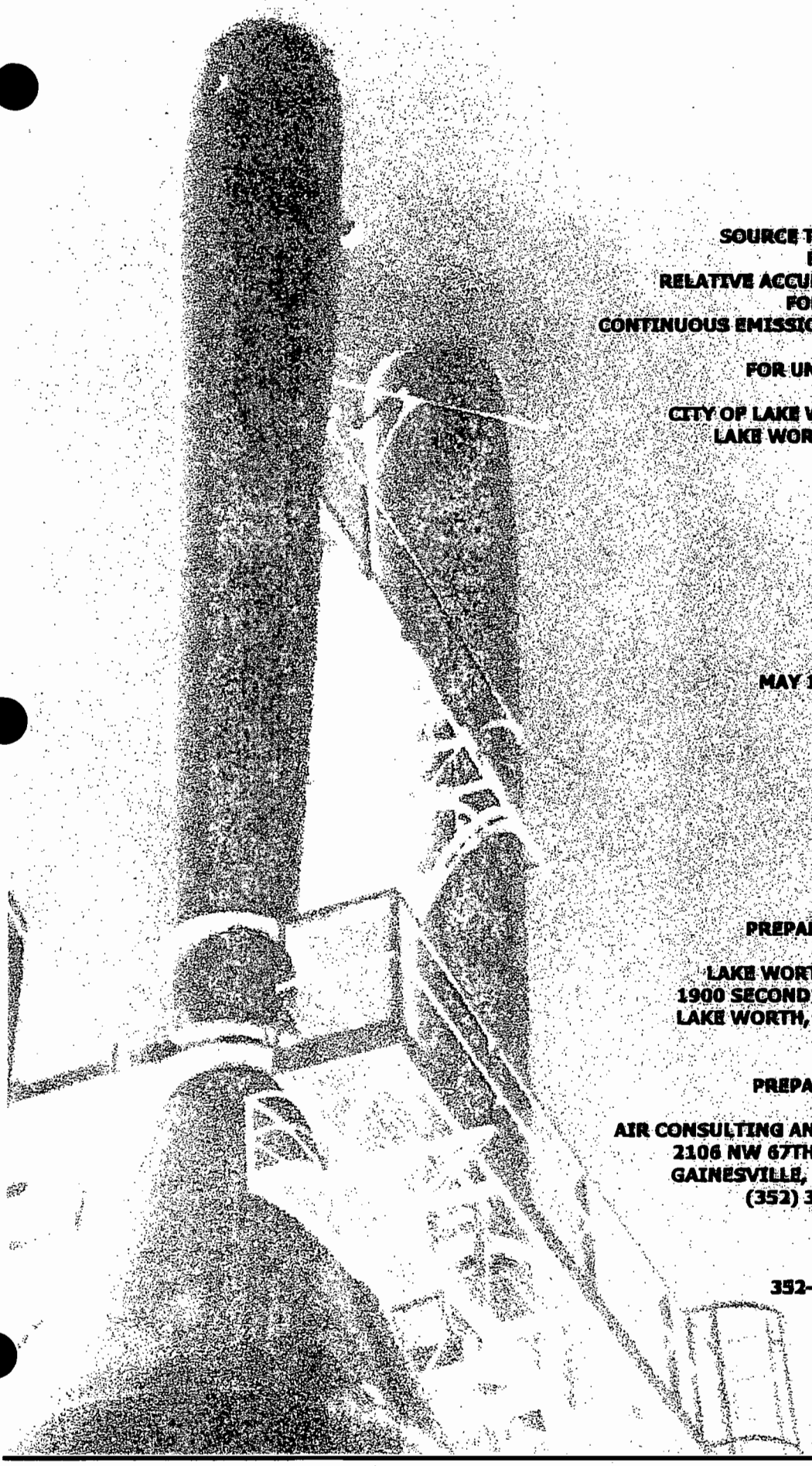
TEST	METHOD	RESULT
GRAVITY, API AT 60 F	D-1298	21.3
GRAVITY, SPECIFIC	D-1298	0.9260
SULFUR, X-RAY, WT PCT	D-4294	1.97
ASH, WT PCT	D-482	0.032
HEAT OF COMBUSTION, BTU/LB	D-4868	18761
HEAT OF COMBUSTION, BTU/GAL		144904
HEAT OF COMBUSTION, BTU/BBL		6085968

MEMBERS ASTM-API-SAE

SAYBOLT

Attachment LW-EU2-I6
Compliance Demonstration Report

Golder Associates



SOURCE TEST REPORT
FOR
RELATIVE ACCURACY TEST AUDITS
FOR THE
CONTINUOUS EMISSION MONITORING SYSTEM

FOR UNIT S-3 AT

CITY OF LAKE WORTH UTILITIES
LAKE WORTH, FLORIDA

MAY 17, 2007

PREPARED FOR:

LAKE WORTH UTILITIES
1900 SECOND AVENUE NORTH
LAKE WORTH, FLORIDA 33461

PREPARED BY:

AIR CONSULTING AND ENGINEERING, INC.
2106 NW 67TH PLACE, SUITE 4
GAINESVILLE, FLORIDA 32653
(352) 335-1889

352-07-01

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ACE
AIR CONSULTING
& ENGINEERING, INC.

2106 N.W. 67th Place • Suite 4 • Gainesville, Florida • 32653
(352) 335-1889 FAX (352) 335-1891

REPORT CERTIFICATION

To the best of my knowledge, all applicable field and analytical procedures comply with Florida Department of Environmental Protection requirements and all test data and plant operating data are true and correct.

Stephen L. Neck, P.E.

6-20-07
Date

1.0 INTRODUCTION

On May 17, 2007 Air Consulting and Engineering, Inc. (ACE) performed United States Environmental Protection Agency (EPA) Part 75 Relative Accuracy Test Audits (RATA's) on the Continuous Emission Monitoring System (CEMS) for the Unit S-3 Boiler at the City of Lake Worth Utilities (Lake Worth) in Lake Worth, Florida.

Mr. Mike Ridge of Lake Worth coordinated the testing and supplied plant CEMS data. Mr. Michael Helmke of the Palm Beach County Health Unit witnessed a portion of the testing.

TABLE 1 - CONTINUOUS EMISSION MONITOR CERTIFICATION

COMPANY NAME: CITY OF LAKE WORTH UTILITIES
SOURCE NAME: UNIT S-3
LOCATION: LAKE WORTH, FLORIDA
DATE: 5/17/2007 FUEL FACTOR(Fc): 1040

RELATIVE ACCURACY DETERMINATION(CO2)

RUN NO.	TIME BEGIN	TIME END	CO2 % RM	CO2 % M	CO2 % DIFF	
1	10:18 AM	10:39 AM	8.47	8.34	0.13	
2	10:49 AM	11:10 AM	8.56	8.41	0.15	
3	12:41 PM	11:02 AM	8.54	8.41	0.13	
4	1:16 PM	1:37 PM	8.48	8.36	0.12	
5	1:47 PM	2:08 PM	8.47	8.33	0.14	
6	2:20 PM	2:41 PM	8.47	8.34	0.13	
7	2:50 PM	3:11 PM	8.45	8.44	0.01	
8	3:22 PM	3:43 PM	8.47	8.29	0.18	
9	3:52 PM	4:13 PM	8.46	8.22	0.24	DELETE
10	4:23 PM	4:44 PM	8.47	8.3	0.17	
TOTAL DATA POINTS:					9	
AVERAGE DIFF.:	:		8.49	8.35	0.13	
Sd:					0.05	
CC:					0.04	
RA:					**1.96**	
BAF(BIAS ADJUSTMENT):					1.015	

RELATIVE ACCURACY DETERMINATION(NOx/DILUENT)

RUN NO.	TIME BEGIN	TIME END	REFERENCE METHOD NOx PPM	REFERENCE METHOD CO2 %	REFERENCE METHOD LB/MMbtu	NOx COMBINED SYSTEM(LB/MMbtu) RM	NOx COMBINED SYSTEM(LB/MMbtu) M	NOx COMBINED SYSTEM(LB/MMbtu) DIFF	
1	10:18 AM	10:39 AM	235.21	8.47	0.3448	0.345	0.380	-0.035	DELETE
2	10:49 AM	11:10 AM	231.41	8.56	0.3357	0.336	0.369	-0.033	
3	12:41 PM	11:02 AM	233.05	8.54	0.3389	0.339	0.359	-0.020	
4	1:16 PM	1:37 PM	226.64	8.48	0.3319	0.332	0.349	-0.017	
5	1:47 PM	2:08 PM	227.38	8.47	0.3334	0.333	0.351	-0.018	
6	2:20 PM	2:41 PM	233.33	8.47	0.3421	0.342	0.359	-0.017	
7	2:50 PM	3:11 PM	233.42	8.45	0.3430	0.343	0.362	-0.019	
8	3:22 PM	3:43 PM	235.18	8.47	0.3448	0.345	0.363	-0.018	
9	3:52 PM	4:13 PM	232.85	8.46	0.3418	0.342	0.361	-0.019	
10	4:23 PM	4:44 PM	233.59	8.47	0.3425	0.342	0.362	-0.020	
TOTAL DATA POINTS:								9	
AVERAGE DIFF.:	:		232.21	8.48	0.340	0.340	0.362	-0.020	
Sd:								0.005	
CC:								0.004	
RA:								**7.04**	
BAF(BIAS ADJUSTMENT):								1.000	

2.0 SUMMARY AND DISCUSSION OF RESULTS

Results of the RATA tests are summarized in Table 1.

The Relative Accuracy for NO_x and CO_2, were 7.04 and 1.96 %, which meets the requirement for annual RATA demonstration. Neither monitor is assigned a bias correction factor. Detailed emission summaries and strip chart copies with data logger records are presented in Appendix C.

Appendix E contains all Plant records.

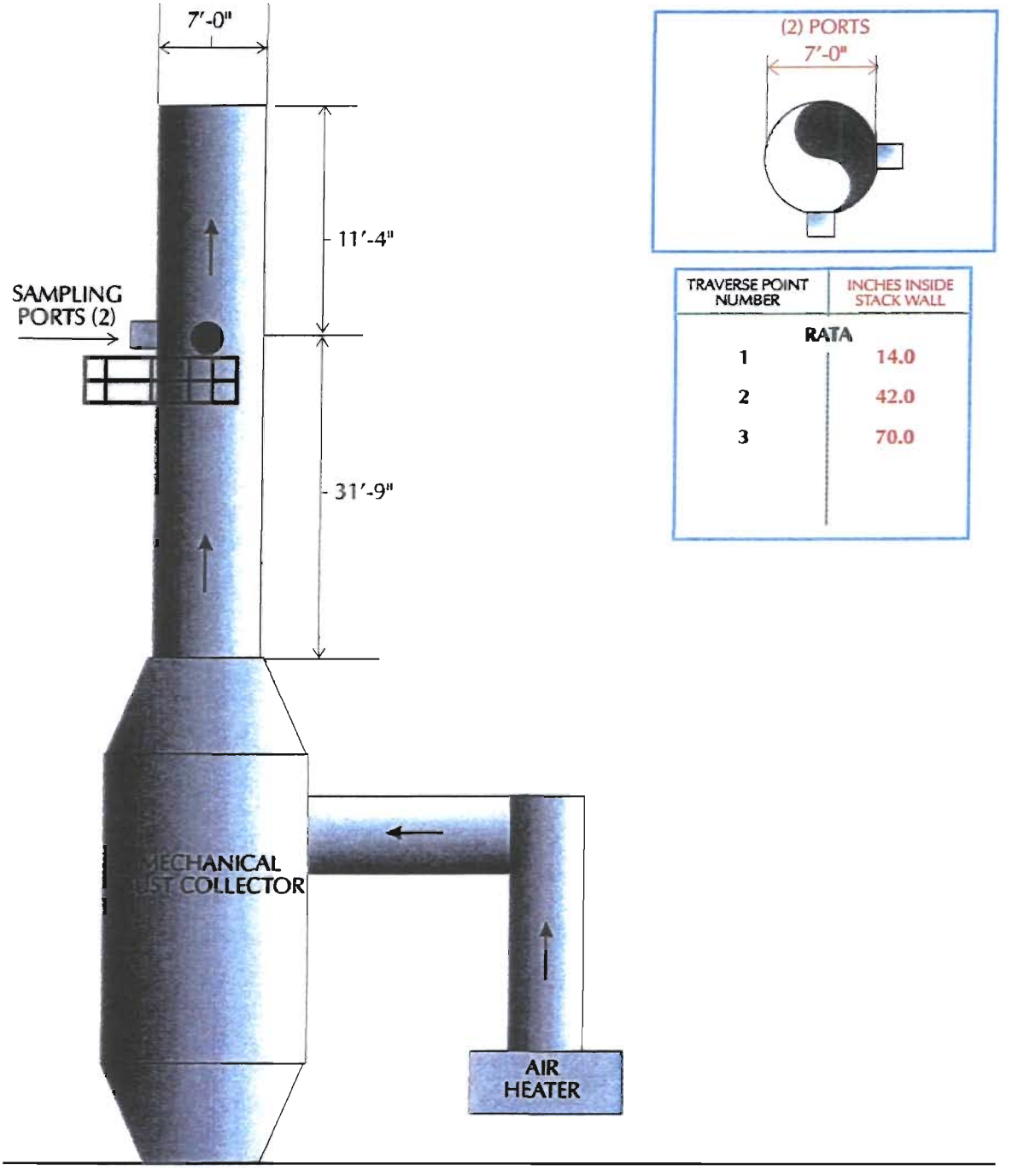
3.0 PROCESS DESCRIPTION AND OPERATION

Unit S-3 was fired on natural gas at a generation rate of between 26 and 27 MW during the RATA test period.

The CEMS is provided by Spectrum Systems and is extractive with a dilution probe. All values are reported on a wet basis.

4.0 SAMPLING POINT LOCATION

The outlet duct schematic and test point location for the RATA sampling is provided in Figure 1.



TRAVERSE POINT NUMBER	INCHES INSIDE STACK WALL
RATA	
1	14.0
2	42.0
3	70.0

NOTE: NOT TO SCALE.

SOURCE: AIR CONSULTING & ENGINEERING, INC. (LWUS3) 12/14/00

FIGURE 1.
SAMPLING POINT LOCATION
UNIT S-3
TOM G. SMITH POWER PLANT
CITY OF LAKE WORTH UTILITIES
LAKE WORTH, FLORIDA

5.0 FIELD AND ANALYTICAL PROCEDURES

5.1 Gaseous Sampling System

The sampling train schematic is provided in Figure 2.

5.2 Dilution Probe

Most gaseous analyzers cannot handle moisture percentages above the dew point temperature. In order to measure gases on a wet basis, the sample is diluted. ACE uses an EPM Manufactured Dilution Probe with dilution rates ranging from 20:1 to 100:1. This probe uses either air or nitrogen as a diluent and injects it in the portion of the probe that is inserted in the effluent gas stream. The diluent is inserted at sufficient pressure and volumetric flow through the probe eductor that a vacuum of greater than 10" Hg is created on a sample orifice. A small portion of the effluent gas is then pulled through the orifice to mix with the diluent gas. Normally the probe is heated by the effluent gases but occasionally (super saturated conditions) it is necessary to heat the probe tip to 250 F. The diluted gas is now well below the moisture dew point and is transported unheated through Teflon tubing to the manifold that supplies samples to the various analyzers.

System calibrations are made by flooding the probe with cal gas just prior to the sample orifice. The cal gases then travel through the exact same path as the effluent gas of interest.

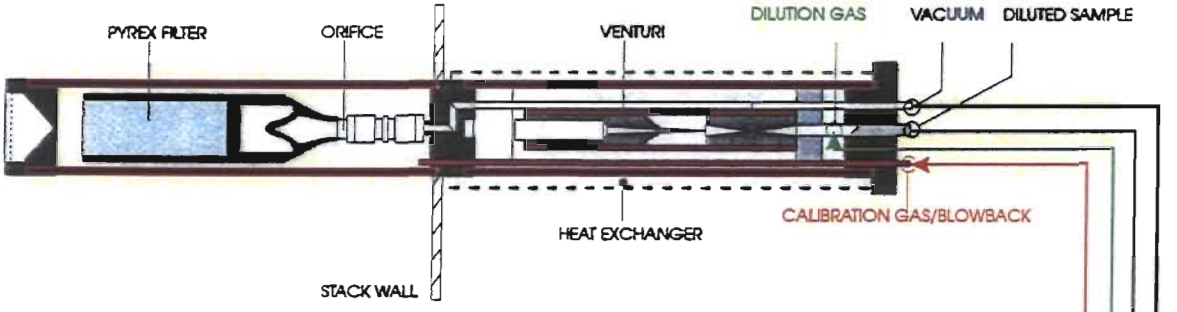
5.3 Test Criteria to be Met

Test points

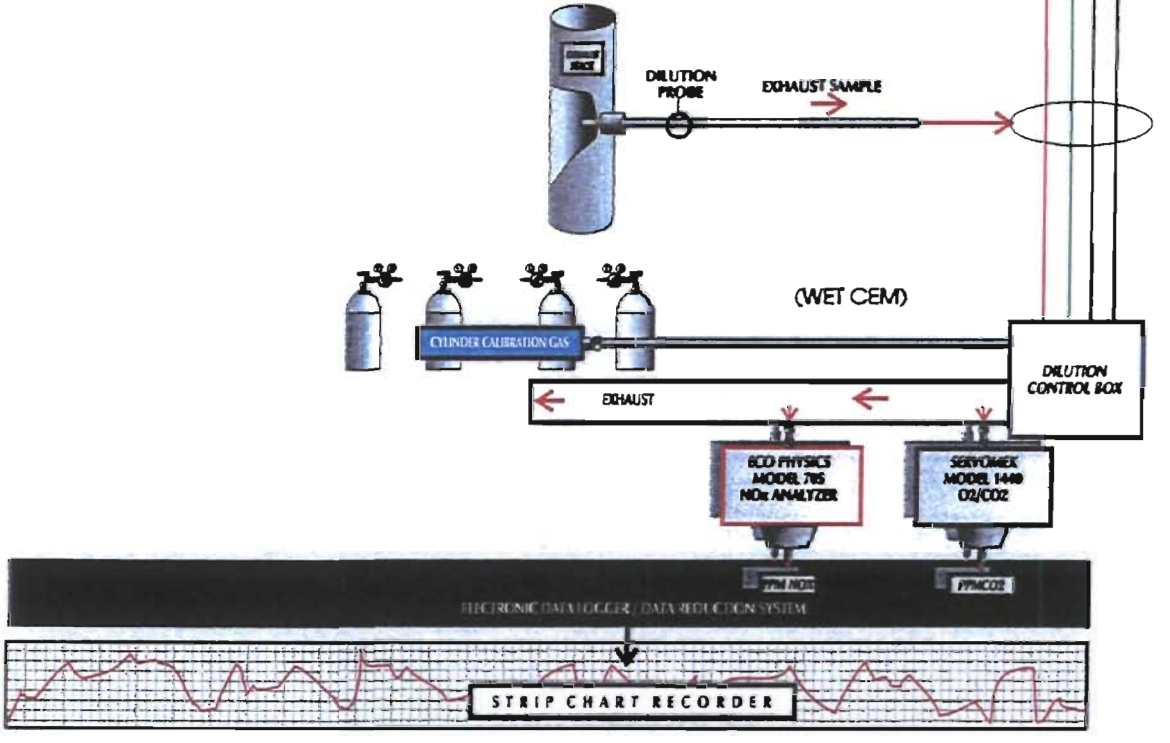
The selection of test points was made in accordance with 40 CFR 60 Appendix B Specification 2. These points are shown in section 4.0.

Calibration Gases

Calibration gases are chosen such that the measured effluent concentration is between 20 and 100% of span if that is practical. Whatever the high calibration value is then defines the span for the gas of interest. A minimum of three cal gases are used. The high range gas defines the span. A mid level gas is then chosen to be 40-60% of the span value. A low level gas is <20% of span and can be a zero gas. All calibration gases must have a current valid EPA Protocol Certificate to an accuracy of ±2%.



DILUTION PROBE DETAIL



CEM MOBILELABORATORY

NOTE: NOT TO SCALE.

SOURCE: AIR CONSULTING & ENGINEERING, INC. (SUG99CEM) 1/12/00

ACE AIR CONSULTING & ENGINEERING, INC.

FIGURE 2.
U.S. EPA METHODS 3A & 7E
WET & DRY GAS CONTINUOUS MONITORING SCHEMATIC
DETERMINATION OF CARBON DIOXIDE AND NITROGEN OXIDE CONCENTRATIONS

Calibration Error Test

Prior to testing each instrument must demonstrate linearity of the three gases to within 2% of span. This is conducted by introducing each of the gases at the manifold that feeds each analyzer or directly at each analyzer. If a dilution system is being used this test is called a "System Calibration Error Test" and the cal bases are injected at the entrance of the sampling system is the same way that the bias demonstration is conducted.

Bias Demonstration

Before and after each test run a zero and either a mid range or a span gas is introduced to the inlet of the entire measurement system. It is introduced as near as possible to the actual point from which the effluent gases are extracted. The response to each of these gases must be within 5% of span to be acceptable. Furthermore, the average run value for the gas that is measured must be bias adjusted by ratioing the average of the pre and post test checks to the certified cal gas values. This adjustment is made using the following equation:

$$C_{gas} = (C_{avg} - C_0) \frac{C_{ma}}{C_m - C_0}$$

Where:

C gas = Run average adjusted for bias.

C avg = Actual unadjusted run average.

C_0 = Average of pre and post zero bias results.

Cm = Average of pre and post upscale cal gas bias results.

Cma = Certified upscale gas concentration.

Response Time

During the system bias checks record the time it takes to reach 95% of the upscale certified gas concentration. Do the same with the low level (or zero) gas. The longer time period is the response time.

Converter Check

When testing for NO_x a NO_2 to NO converter check must be performed. Most NOx analyzers operate with a chemiluminescent detector which reacts only to Nitric Oxide (NO) to form NO_2. While boilers typically contain very little NO_2 (0-2%), combustion turbines and diesel engines sometimes contain as much as 20% of the total NO_x emissions as NO_2. For that reason it is necessary to send the sample gas stream through a reducing converter to convert NO_2 to NO. Method 7E requires the converter efficiency to be at a minimum of 90%. Since these converters deteriorate with usage the conversion efficiency should be checked before each test. Such a demonstration is allowed to be made after testing is completed or after several sources are completed, but the tester risks non-acceptance of test results if the converter then fails to meet the minimum criteria. Results of our converter check are located in the Q/A section of the ACE report appendices.

Sample Time

The sampling time per test point must be at least two times the system response time.

Drift Test

An analyzer drift test is demonstrated for each test run. The pre and post zero and upscale responses must differ by more than 3% of span.

5.4 Specific Instrumentation

NO_x was measured with an ECO Physics Model 70S chemiluminescent analyzer. CO_2 was measured with a Servomex 1440 O_2/CO_2 analyzer.

Attachment LW-EU2-IV5
Acid Rain Permit Application

Retired Unit Exemption

For more information, see instructions and refer to Rule 62-214.340(2), F.A.C., and 40 CFR 72.8

This submission is: ☐ **New** ☐ **Revised** ☒ **Renewal**

STEP 1
Identify the unit by plant name, State, ORIS code and unit ID#.

Tom G. Smith Municipal Power Plant	FL	0673	S-4
Plant Name	State	ORIS Code	Unit ID#

STEP 2
Identify the first full calendar year in which the unit meets (or will meet) the requirements of Rule 62-214.340(2)(a), F.A.C.

January 1, 2006

STEP 3
Read the special provisions.

Special Provisions

(1) A unit exempt under Rule 62-214.340(2), F.A.C., shall not emit any sulfur dioxide and nitrogen oxides starting on the date that the exemption takes effect. The owners and operators of the unit will be allocated allowances in accordance with 40 CFR part 73 subpart B. If the unit is a Phase I unit, for each calendar year in Phase I, the designated representative of the unit shall submit a Phase I permit application in accordance with 40 CFR part 72 subparts C and D and an annual certification report in accordance with 40 CFR 72.90 through 72.92 and is subject to 40 CFR 72.95 and 72.96.
(2) A unit exempt under Rule 62-214.340(2), F.A.C., shall not resume operation unless the designated representative of the source that includes the unit submits a complete Acid Rain part application under Rule 62-214.320, F.A.C., for the unit not less than 24 months prior to the date on which the unit is first to resume operation.
(3) The owners and operators and, to the extent applicable, the designated representative of a unit exempt under Rule 62-214.340(2), F.A.C., shall comply with the requirements of Chapter 62-214, F.A.C., and the Acid Rain Program concerning all periods for which the exemption is not in effect, even if such requirements arise, or must be complied with, after the exemption takes effect.
(4) For any period for which a unit is exempt under Rule 62-214.340(2), F.A.C., the unit is not an Acid Rain unit and is not eligible to be an opt-in source under 40 CFR part 74. As a non-Acid Rain Unit, the unit shall continue to be subject to any other applicable requirements under 40 CFR part 70.
(5) For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under Rule 62-214.340(2), F.A.C., shall retain at the source that includes the unit records demonstrating that the unit is permanently retired. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the EPA or the Department. The owners and operators bear the burden of proof that the unit is permanently retired.
(6) On the earlier of the following dates, a unit exempt under Rule 62-214.340(2), F.A.C., shall lose its exemption and become an Acid Rain Unit: (i) the date on which the designated representative submits an Acid Rain part application under paragraph (2); or (ii) the date on which the designated representative is required under paragraph (2) to submit an Acid Rain part application. For the purpose of applying monitoring requirements under 40 CFR part 75, a unit that loses its exemption under Rule 62-214.340(2), F.A.C., shall be treated as a new unit that commenced commercial operation on the first date on which the unit resumes operation.

STEP 4
Read the appropriate certification and sign and date.

Certification (for designated representatives only)

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 David L. Mulvay, Alternate Designated Representative	
Signature David L. Mulvay	Date 6-29-07

STEP 4, cont'd.
Read the appropriate certification and sign and date.

Certification (for certifying officials only)

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	
Signature	Date

Certification (for additional certifying officials, if applicable)

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	
Signature	Date

Certification (for additional certifying officials, if applicable)

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	
Signature	Date

United States
Environmental Protection Agency
Acid Rain Program

OMB No. 2060-0258

Certificate of Representation

For more information, see instructions and refer to 40 CFR 72.24

This submission is: • New • X Revised (submission must be complete; see instructions)

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

Plant Name	State	ORIS Code
Tom G. Smith Power Plant	FL	0673

STEP 2
Enter requested information for the designated representative.

Name: Paul C. Boyer, Jr.	
Address: Lake Worth Utilities 1900 2nd Avenue North Lake Worth, FL 33461	
Phone Number: 561-586-1665	Fax Number: 561-586-1702
E-mail address (if available): pboyer@lakeworth.org	

STEP 3
Enter requested information for the alternate designated representative, if applicable.

Name: David Mulvay	
Address: Lake Worth utilities 1900 2nd Avenue North Lake Worth, FL 33461	
Phone Number: 561-533-7379	Fax Number: 561-533-7387
E-mail address (if available): dmulvay@lakeworth.org	

STEP 4: Complete Steps 5 and 6, read the certifications, sign and date.

I certify that I was selected as the designated representative or alternate designated representative, as applicable, by an agreement binding on the owners and operators of the affected source and each affected unit at the source.

I certify that I have all necessary authority to carry out my duties and responsibilities under the Acid Rain Program on behalf of the owners and operators of the affected source and of each affected unit at the source and that each such owner and operator shall be fully bound by my representations, actions, inactions, or submissions.

I certify that the owners and operators of the affected source and of each affected unit at the source shall be bound by any order issued to me by the Administrator, the permitting authority, or a court regarding the source or unit.

Where there are multiple holders of a legal or equitable title to, or a leasehold interest in, an affected unit, or where a utility or industrial customer purchases power from an affected unit under life-of-the-unit, firm power contractual arrangements, I certify that:

I have given a written notice of my selection as the designated representative or alternate designated representative, as applicable, and of the agreement by which I was selected to each owner and operator of the affected source and of each affected unit at the source; and

Allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in proportion to each holder's legal, equitable, leasehold, or contractual reservation or entitlement, except that, if such multiple holders have expressly provided for a different distribution of allowances by contract, that allowances and the proceeds of transactions involving allowances will be deemed to be held or distributed in accordance with the contract.

Plant Name (from Step 1) Tom G. Smith Power Plant

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected 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.

Signature (designated representative) Paul C Bryant	Date 10/23/06
Signature (alternate designated representative) David L. Mulvey	Date 10/23/06

STEP 5
Provide the name of every owner and operator of the source and identify each affected unit they own and/or operate.

Name City of Lake Worth					X Owner	X Operator
ID# S-3	ID# S-4	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#

Name					Owner	Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#

Name					Owner	Operator
ID#	ID#	ID#	ID#	ID#	ID#	ID#
ID#	ID#	ID#	ID#	ID#	ID#	ID#

STEP 6
For any new affected units listed at STEP 5 that have not commenced commercial operation, enter the projected date on which the unit is expected to commence commercial operation.

ID#	Projected Commence Commercial Operation Date:
ID#	Projected Commence Commercial Operation Date:
ID#	Projected Commence Commercial Operation Date:
ID#	Projected Commence Commercial Operation Date:

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☒ 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).

☐ 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.

☐ 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.

2. Description of Emissions Unit Addressed in this Section:
Gas Turbine #1 (GT-1)

3. Emissions Unit Identification Number: **006**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**1976**	**49**	☐ Yes ☐ No

9. Package Unit:
Manufacturer: **Westinghouse** Model Number:

10. Generator Nameplate Rating: **30** MW

11. Emissions Unit Comment:

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

2. Control Device or Method Code(s):

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: **435** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: hours/day weeks/year	days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **GT-1 Gas Turbine #1**	2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **V**	6. Stack Height: **46** feet	7. Exit Diameter: **16** feet
8. Exit Temperature: **837 °F**	9. Actual Volumetric Flow Rate: **983,593** 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): **592.8** North (km): **2943.7**	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Internal Combustion Engines – Electric Generation – Distillate Oil - Turbine**		
2. Source Classification Code (SCC): **2-01-001-01**	3. SCC Units: **1,000 gallons**	
4. Maximum Hourly Rate: **3.12**	5. Maximum Annual Rate: **27,331**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **139.3**
10. Segment Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
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:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO_2	---	---	NS
NO_x	---	---	EL
PM	---	---	NS
CO	---	---	NS
VOC	---	---	NS
PM_{10}	---	---	NS

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **391.5** lb/hour **1,715** tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.9 lb NO_x per mmBtu** Reference: **NO_x RACT Rule**	7. Emissions Method Code: **1**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Potential emissions based on oil firing and 8,760 hr/yr.
(0.9 lb NO_x per mmBtu) (435 MMBtu/hr)=391.5 lb/hr

11. Potential, Fugitive, and Actual Emissions Comment:

Potential emissions based on maximum heat input rate and 8,760 hr/yr.

Corresponding potential emissions rate for natural gas-firing = (0.5 lb/MMBtu)(435 MMBtu/hr) = 217.5 lb/hr

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.9 lb NO_x per mmBtu**	4. Equivalent Allowable Emissions: **391.5** lb/hour **1,715** tons/year
5. Method of Compliance: **EPA Test Method 7E conducted annually, when burning liquid fuels for 400 or more hours per year.**	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation **1** of **1**

1. Visible Emissions Subtype: **VE**	2. Basis for Allowable Opacity: ☒ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: **20** % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: **Compliance Test Method 9 conducted annually when burning liquid fuels for 400 or more hours per year. Testing conducted using the fuel and/or process input which are expected to result in the highest emissions and within 10 percent of the rated capacity of the source.**	
5. Visible Emissions Comment: **Rule 62-296.310(2)**	

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: ☐ Rule ☐ Other
3. Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment:	

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be 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:	

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:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: **LW-EU3-I1** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: **LW-EU1-I2** [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [ ] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [x] Not Applicable

6. Compliance Demonstration Reports/Records
   [ ] Attached, Document ID: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [ ] To be Submitted, Date (if known): _____
   Test Date(s)/Pollutant(s) Tested: _____
   _____
   [x] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [x] Not Applicable

Additional Requirements for Air Construction Permit Applications

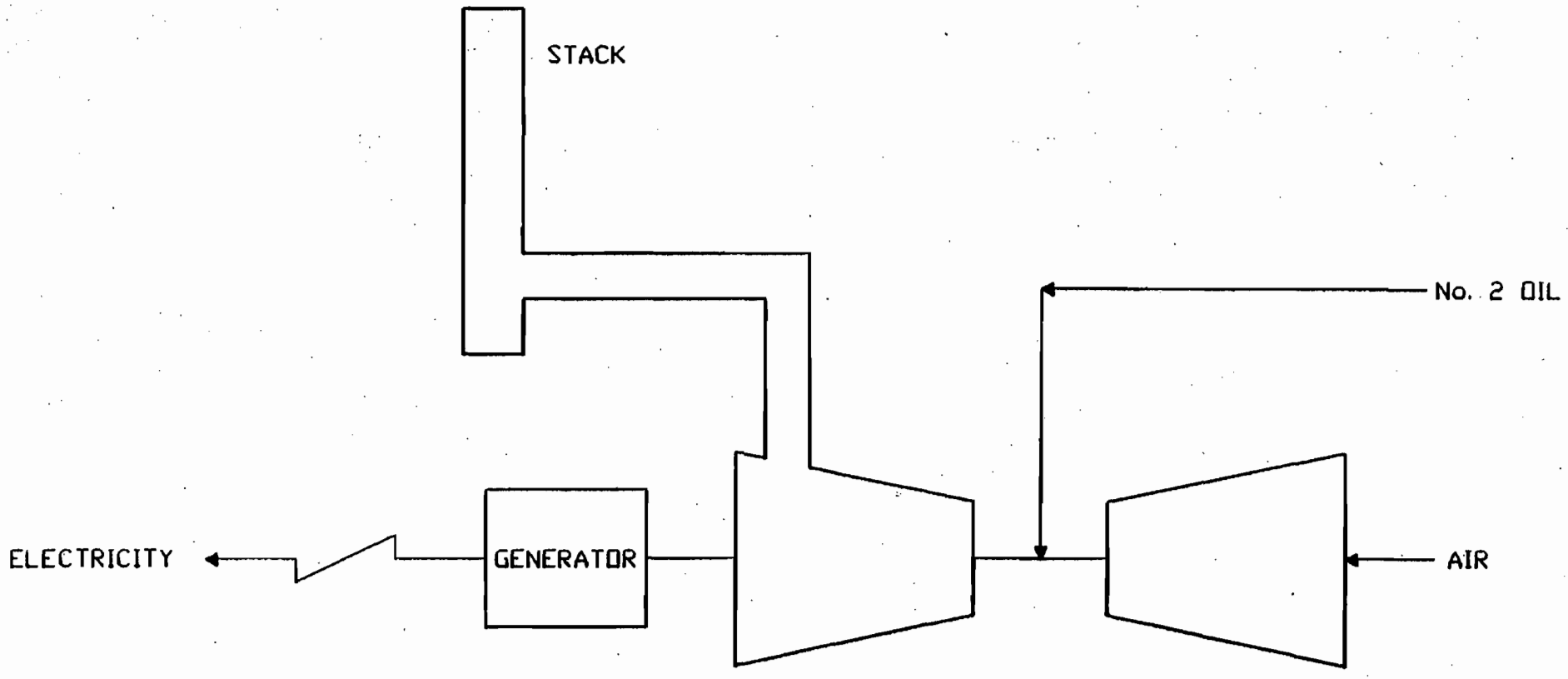
1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   [x] Attached, Document ID: **LW-EU1-IV1**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ [x] Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ [x] Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ [x] Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
   ☐ Copy Attached, Document ID:
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
   ☐ Attached, Document ID: _____ ☐ Previously Submitted, Date: _____
   [x] Not Applicable

Additional Requirements Comment

Attachment LW-EU3-I1
Process Flow Diagram



Tom G. Smith Power Plant Title V Emissions - GT-1

Attachment LW-EU4-I1
Process Flow Diagram
Lake Worth Utilities - City of Lake Worth, Florida

Source: Golder, 2002.

Golder Associates

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☒ 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).

☐ 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.

☐ 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.

2. Description of Emissions Unit Addressed in this Section:
CC1 Combined Cycle Unit Combustion Turbine #2/Steam Unit #5 (GT-2/S-5)

3. Emissions Unit Identification Number: **011**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A		**1978**	**49**	☐ Yes ☐ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: **29.5** MW

11. Emissions Unit Comment:

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

2. Control Device or Method Code(s):

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: **317.6** million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: hours/day weeks/year	days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment: **GT-2/S-5 is nominally rated at 29.5 MW consisting of a gas turbine (GT-2) nominally rated at 20 MW and a Heat Recovery Steam Generator (S-5) nominally rated at 10 MW.**	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **CC1 Combined Cycle Unit (GT-2/S-5)**	2. Emission Point Type Code: **1**
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:	
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:	

5. Discharge Type Code: **V**	6. Stack Height: **75** feet	7. Exit Diameter: **10** feet
8. Exit Temperature: **Oil: 404 °F** **Gas: 406 °F**	9. Actual Volumetric Flow Rate: **Oil: 412,466 acfm** **Gas: 429,223 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): **592.8** North (km): **2943.7**	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)

15. Emission Point Comment:
By-pass stack parameters:
Stack Height = 49 feet
Exit Dimensions = 12 feet 7 inches x 10 feet 6.5 inches
Maximum Exit Temperature = 1,020 °F
Maximum Actual Volumetric Flow rate = 733,562 (gas) acfm
Discharge Type = Vertical

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type): **Internal Combustion Engines – Electric Generation – Distillate Oil - Turbines**		
2. Source Classification Code (SCC): **2-01-001-01**	3. SCC Units: **1,000 gallons**	
4. Maximum Hourly Rate: **2.28**	5. Maximum Annual Rate: **19,973**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur: **0.35**	8. Maximum % Ash:	9. Million Btu per SCC Unit: **139.3**
10. Segment Comment:		

D. SEGMENT (PROCESS/FUEL) INFORMATION (CONTINUED)

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type): **Internal Combustion Engines – Electric Generation – Natural Gas - Turbine**		
2. Source Classification Code (SCC): **2-01-002-01**	3. SCC Units: **mmcf**	
4. Maximum Hourly Rate: **0.31**	5. Maximum Annual Rate: **2,715.6**	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: **1,027**
10. Segment Comment:		

Segment Description and Rate: Segment __ of __

1. Segment Description (Process/Fuel Type):		
2. Source Classification Code (SCC):	3. SCC Units:	
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:		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
SO_2	---	---	EL
NO_x	---	---	EL
PM	---	---	NS
CO	---	---	NS
VOC	---	---	NS
PM_{10}	---	---	NS

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **SO_2**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **115** lb/hour **503** tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **7.2% S x 2 lb SO_2 per 1,000 gal Oil** Reference: **Stoicheometric Calculation**	7. Emissions Method Code: **3**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions: **Potential emissions based on oil firing. (7.2 lb/gal) x (2,280 gal /hr)(0.0035 S/lb Oil)x(2 lb SO_2/ 1 lb S) =115 lb/hr**	
11. Potential, Fugitive, and Actual Emissions Comment: **Potential emissions based on maximum firing rate and 8,760 hr/yr.**	

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **Other**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.35% Sulfur**	4. Equivalent Allowable Emissions: **115** lb/hour **503** tons/year
5. Method of Compliance: **As-fired fuel oil will be sampled each day oil is fired. Composite fuel analysis conducted monthly. SO_2 emissions will be calculated stoichiometrically, per Specific Condition D.7**	
6. Allowable Emissions Comment (Description of Operating Method):	

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL, FUGITIVE, AND ACTUAL EMISSIONS

(Optional for unregulated emissions units.)

Potential, Estimated Fugitive, and Baseline & Projected Actual Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: **NO_x**	2. Total Percent Efficiency of Control:
3. Potential Emissions: **285.8** lb/hour **1,252** tons/year	4. Synthetically Limited? ☐ Yes ☐ No
5. Range of Estimated Fugitive Emissions (as applicable): to tons/year	
6. Emission Factor: **0.9 lb NO_x per mmBtu (Oil)** Reference: **NO_x RACT Rule**	7. Emissions Method Code: **1**
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years

10. Calculation of Emissions:

Potential emissions based on oil firing.
(0.9 lb NO_x per mmBtu) (317.6 MMBtu/hr)=285.8 lb/hr

11. Potential, Fugitive, and Actual Emissions Comment:

Potential emissions based on maximum heat input rate and 8,760 hr/yr. The corresponding rate for natural gas-firing= (0.5 lb/MMBtu)(317.6 MMBtu/hr)=158.8 lb/hr

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: **RULE**	2. Future Effective Date of Allowable Emissions:
3. Allowable Emissions and Units: **0.9 lb NO_x per mmBtu**	4. Equivalent Allowable Emissions: **285.8** lb/hour **1,252** tons/year
5. Method of Compliance: **EPA Test Method 7E conducted annually, when burning liquid fuels for 400 or more hours per year.**	
6. Allowable Emissions Comment (Description of Operating Method):	

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity:
VE	☒ Rule ☐ Other

3. Allowable Opacity:
Normal Conditions: **20** % Exceptional Conditions: %
Maximum Period of Excess Opacity Allowed: min/hour

4. Method of Compliance:
Compliance Test Method 9 conducted annually when burning liquid fuels for 400 or more hours per year. Testing conducted using the fuel and/or process input which are expected to result in the highest emissions and within 10 percent of the rated capacity of the source.

5. Visible Emissions Comment:
Rule 62-296.310(2)

Visible Emissions Limitation: Visible Emissions Limitation ___ of __

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity:
	☐ Rule ☐ Other

3. Allowable Opacity:
Normal Conditions: % Exceptional Conditions: %
Maximum Period of Excess Opacity Allowed: min/hour

4. Method of Compliance:

5. Visible Emissions Comment:

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be 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:	

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:	

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1. Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: **LW-EU4-I1** [ ] Previously Submitted, Date _____

2. Fuel Analysis or Specification (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [x] Attached, Document ID: **LW-EU1-I2** [ ] Previously Submitted, Date _____

3. Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____

4. Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [ ] Not Applicable (construction application)

5. Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
   [ ] Attached, Document ID: _____ [ ] Previously Submitted, Date _____
   [x] Not Applicable

6. Compliance Demonstration Reports/Records
   [x] Attached, Document ID: **LW-EU4-I6**
   Test Date(s)/Pollutant(s) Tested: **September 2006 for NOx and Opacity**

   [ ] Previously Submitted, Date: _____
   Test Date(s)/Pollutant(s) Tested: _____

   [ ] To be Submitted, Date (if known):_____
   Test Date(s)/Pollutant(s) Tested: _____

   [ ] Not Applicable

   Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.

7. Other Information Required by Rule or Statute
   [ ] Attached, Document ID: _____ [x] Not Applicable

Additional Requirements for Air Construction Permit Applications

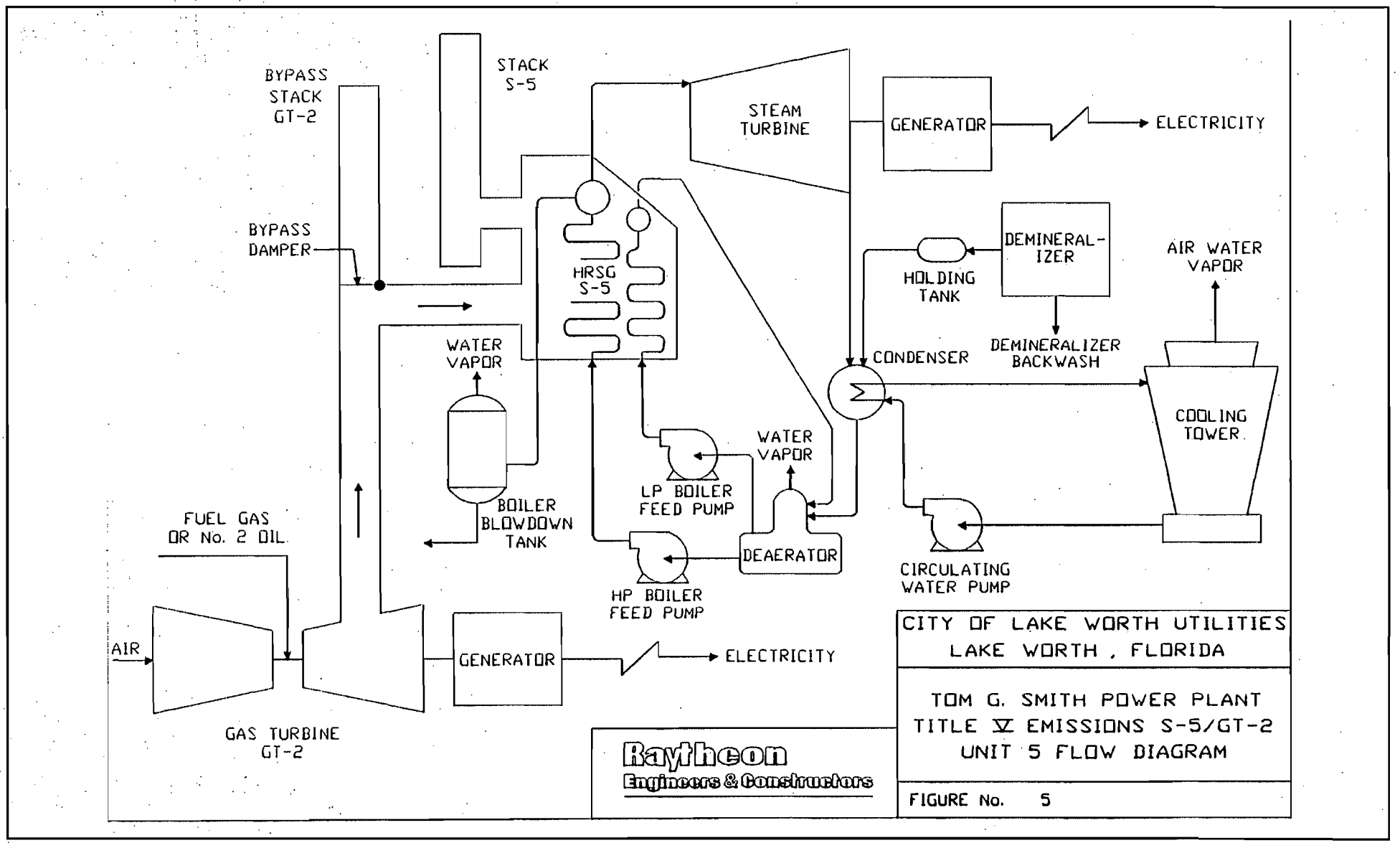
1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7), F.A.C.; 40 CFR 63.43(d) and (e))
   ☐ Attached, Document ID: _____ ☐ Not Applicable
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and Rule 62-212.500(4)(f), F.A.C.)
   ☐ Attached, Document ID: _____ ☐ Not Applicable
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)
   ☐ Attached, Document ID: _____ ☐ Not Applicable

Additional Requirements for Title V Air Operation Permit Applications

1. Identification of Applicable Requirements
   ☒ Attached, Document ID: **LW-EU1-IV1**
2. Compliance Assurance Monitoring
   ☐ Attached, Document ID: _____ ☒ Not Applicable
3. Alternative Methods of Operation
   ☐ Attached, Document ID: _____ ☒ Not Applicable
4. Alternative Modes of Operation (Emissions Trading)
   ☐ Attached, Document ID: _____ ☒ Not Applicable
5. Acid Rain Part Application
   ☐ Certificate of Representation (EPA Form No. 7610-1)
   ☐ Copy Attached, Document ID:
   ☐ Acid Rain Part (Form No. 62-210.900(1)(a))
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☐ Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)
   ☐ Attached, Document ID:_____ ☐ Previously Submitted, Date:_____
   ☒ Not Applicable

Additional Requirements Comment

Attachment LW-EU4-I1
Process Flow Diagram



Attachment LW-EU5-I1
Process Flow Diagram
Lake Worth Utilities - City of Lake Worth, Florida

Source: Golder, 2002.

Golder Associates

Attachment LW-EU4-I6
Compliance Demonstration Report

Golder Associates

SOURCE TEST REPORT
FOR
OXIDES OF NITROGEN AND VISIBLE EMISSIONS

COMBINED CYCLE COMBUSTION TURBINE CGT-2/S-5

FDEP PERMIT NUMBER 0990045-004-AV

TOM G. SMITH POWER PLANT
CITY OF LAKE WORTH
LAKE WORTH, FLORIDA

SEPTEMBER 7, 2006

PREPARED FOR:

LAKE WORTH UTILITIES
1900 SECOND AVENUE NORTH
LAKE WORTH, FLORIDA 33461

PREPARED BY:

AIR CONSULTING AND ENGINEERING, INC.
2106 NW 67TH PLACE, SUITE 4
GAINESVILLE, FLORIDA 32653
(352) 335-1889

352-06-01

1.0 INTRODUCTION

On September 7, 2006, Air Consulting and Engineering, Inc. (ACE) conducted Oxides of Nitrogen (NO_x) emissions testing on the outlet stacks of the Combined Cycle Gas Combustion Turbine GT-2/S-5 (EU011) at the City of Lake Worth Utilities Department (City of Lake Worth) - Tom G. Smith Power Plant in Lake Worth, Florida.

Testing was performed to demonstrate compliance with the conditions of the Florida Department of Environmental Protection (FDEP) Permit Number 0990045-004-AV.

The following United States Environmental Protection Agency (EPA) Methods were used; EPA Method 9 for Visible Emissions determination and EPA Method 7E for NO_x determinations with EPA Method 3A for Oxygen (O_2) as the dilutent gas.

An Eco Physics Model 70S chemiluminescent NO_x analyzer and a Servomex CO_2/O_2 analyzer were utilized for the testing.

Mr. Mike Ridge of the City of Lake Worth coordinated the testing effort and provided plant production data.

2.0 SUMMARY AND DISCUSSION OF RESULTS

Table 1 summarizes the emission results and flue gas parameters for GT-2/S-5.

The combustion turbine GT-2/S-5 was tested while firing natural gas at normal load range. NOx emissions averaged 0.343 lbs/MMBTU, which compared to the permitted standard of 0.50 lbs/MMBTU (see Table 1).

Visible emissions averaged zero percent opacity for the highest six-minute period of the one-hour test.

VE data sheets are presented in Appendix D.

Emission summaries and data logger records with strip chart copies are presented in Appendices B, and C, respectively.

3.0 PROCESS DESCRIPTION AND OPERATION

The combined combustion turbine GT2/S-5 consists of a gas turbine rated at 20 MW and a heat recovery steam generator (S-5) rated at 10 MW. GT-2 has a maximum heat input of 317.6 MMBTUH and is capable of operating on natural gas and fuel oil. During the test, the unit was fired with natural gas and achieved a combined average power output of 13.8 MW.

Production is provided in Appendix F.

Table 1. Emission Summary
Combustion Turbine CGT-2/S-5 - Gas Fired
Tom G. Smith Power Plant
City of Lake Worth
Lake Worth, Florida
September 7, 2006

Run Number	Time	Oxygen %	CO2 %	NOx Emissions ppm	NOx Emissions lbs/MMBTU
Full Load 29.1 MW					
1	1000-1100	15.97	2.93	77.27	0.341
2	1115-1215	15.98	2.92	77.89	0.344
3	1226-1326	15.98	2.92	78.06	0.345
Average	—	15.98	2.92	77.74	0.343

Fd = Natural Gas Factor = 8710 MMBTU/dscf
lbs/MMBTU = ppm(2.595 x 10^E-9)MW (20.9/20.9-%O2)(Fd)
MW NOx = 46 lbs/lb-mole

Allowable Emissions
NOx = 0.50 lbs/MMBTU

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application – Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. **The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit.** A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1. Regulated or Unregulated Emissions Unit? (Check one, if applying for an initial, revised or renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)

☒ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.

☐ The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in this Section: (Check one)

☐ 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).

☐ 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.

☒ 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.

2. Description of Emissions Unit Addressed in this Section:
Fuel Oil Storage Tanks 10, 11, and 12
Tank 10 is fixed roof 20,134-gallon capacity, constructed 05/92.
Tank 11 is fixed roof 20,134-gallon capacity, constructed 05/92.
Tank 12 is fixed roof 140,798-gallon capacity, constructed 05/92.

3. Emissions Unit Identification Number: **No ID**

4. Emissions Unit Status Code:	5. Commence Construction Date:	6. Initial Startup Date:	7. Emissions Unit Major Group SIC Code:	8. Acid Rain Unit?
A				☐ Yes ☐ No

9. Package Unit:
Manufacturer: Model Number:

10. Generator Nameplate Rating: MW

11. Emissions Unit Comment:

Emissions Unit Control Equipment

1. Control Equipment/Method(s) Description:

2. Control Device or Method Code(s):

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1. Maximum Process or Throughput Rate:	
2. Maximum Production Rate:	
3. Maximum Heat Input Rate: million Btu/hr	
4. Maximum Incineration Rate: pounds/hr tons/day	
5. Requested Maximum Operating Schedule: hours/day weeks/year	days/week **8,760** hours/year
6. Operating Capacity/Schedule Comment:	

C. EMISSION POINT (STACK/VENT) INFORMATION
(Optional for unregulated emissions units.)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram: **T-10, T-11, T-12**	2. Emission Point Type Code: **3**	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: **P**	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: **77 °F**	9. Actual Volumetric Flow Rate:	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: **31** feet	
13. Emission Point UTM Coordinates... Zone: **17** East (km): **592.8** North (km): **2943.7**	14. Emission Point Latitude/Longitude... Latitude (DD/MM/SS) Longitude (DD/MM/SS)	
15. Emission Point Comment: **The VOC potential emissions from Tanks 10 and 11 are 63 lb/yr each. Tanks 10 and 11 are identical. The VOC potential emissions from Tank 12 are 392 lb/yr.**		

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type): **Working loss and breathing loss from fixed roof storage tanks.**		
2. Source Classification Code (SCC):	3. SCC Units:	
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: **4-03-010-21 Distillate Fuel No.2 Fixed Roof Working Loss** **4-03-010-19 Distillate Fuel No.2 Fixed Roof Breathing Loss** **Capacity: Tanks 10 and 11 = 20,134 gallons each** **Tanks 12 = 140,785 gallons**		

E. EMISSIONS UNIT POLLUTANTS

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
VOC	---	---	**NS**