

Florida Department of
Environmental Protection

Memorandum

TO: Joseph Kahn

THRU Trina L. Vielhauer

THRU: A. A. Linero, P.E. *AAL*

FROM: David L. Read *DLR*

DATE: December 21, 2007

SUBJECT: City of Lake Worth
Tom G. Smith Power Plant

FINAL Permit Package
Title V Air Operation Permit Renewal
FINAL Permit No.: 0990045-005-AV

Attached for approval and signature is a permit to renew the Title V air operation permit. The permit renewal is for the operation of the Tom G. Smith Power Plant.

The STATEMENT OF BASIS contains a brief overview of the facility and changes made compared to the previous Title V permit. This permit was processed using a parallel review.

We recommend your approval and signature.

Attachments

TLV/AAL/dlr

NOTICE OF FINAL PERMIT

Electronically Sent – Received Receipt Requested

In the Matter of an
Application for Permit Renewal by:


Mr. David L. Mulvay
Plant Manager
City of Lake Worth Utilities
1900 2nd Avenue North
Lake Worth, FL 33461

Title V Permit Renewal No. 0990045-005-AV
Tom G. Smith Power Plant and
Lake Worth Water Treatment Plant
Palm Beach County
Florida

Enclosed is FINAL Title V Permit Renewal Number 0990045-005-AV for the operation of the Tom G. Smith Power Plant and the Lake Worth Water Treatment Plant located at 117 College Street, Lake Worth, Palm Beach County, Florida issued pursuant to Chapter 403, Florida Statutes (F.S.).

Any party to this order (permit) has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station (MS) #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 (thirty) days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Trina L. Vielhauer, Chief
Bureau of Air Regulation

TLV/aal/dlr

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by e-mail with return receipt requested before the close of business on 12/21/07 to the persons listed:

David L. Mulvay, Lake Worth Utilities: dmulvay@lakeworth.org

Lee Hoefert, P.E., Southeast District: lee.hoefert@dep.state.fl.us

Jim Stormer, Palm Beach County Health Department: james_stormer@doh.state.fl.us

Scott Osbourn, P.E., Golder Associates: sosbourn@golder.com

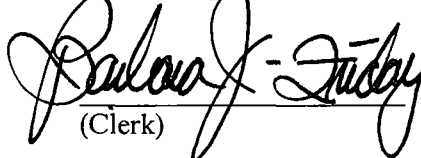
Gracy Danois, EPA Region 4: danois.gracy@epa.gov

Katy Forney, EPA Region 4: forney.kathleen@epa.gov

Clerk Stamp

FILING AND ACKNOWLEDGMENT

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


(Clerk) 12/21/07
(Date)

FINAL PERMIT DETERMINATION

I. Public Notice.

A "Written Notice of Intent to Issue Title V Air Operation Permit" to the City of Lake Worth Utilities for the Tom G. Smith Power Plant and the Lake Worth Water Treatment Plant located at 117 College Street, Lake Worth, Palm Beach County, Florida was clerked and posted on the Department's web site on October 17, 2007. This permit was processed using a parallel review. The DRAFT/PROPOSED Permit was available for public inspection at the Department's Southeast District Office, 400 North Congress Ave, Suite 200, West Palm Beach, Florida 33401 and the permitting authority's office in Tallahassee. The "Public Notice of Intent to Issue Title V Air Operation Permit" was published in the Palm Beach Post on October 22. Proof of publication of the "Public Notice of Intent to Issue Title V Air Operation Permit" was received on November 3.

II. Public Comment(s).

No comments were received from the public concerning the DRAFT/PROPOSED Title V Permit Renewal.

III. U.S. EPA Review.

On October 17, the Department informed U.S. EPA Region 4 that this permit was being processed using a parallel review. U.S. EPA was notified of the publication date of the Public Notice on November 3. The U.S. EPA review period ended on December 5 (Day 45). No comments were received from U.S. EPA Region 4 on the DRAFT/PROPOSED Title V Permit Renewal.

IV. Conclusion.

The permitting authority hereby issues the FINAL Title V Permit Renewal.

STATEMENT OF BASIS

City of Lake Worth Facility

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Facility ID No.: 0990045

Palm Beach County

TITLE V AIR OPERATION PERMIT RENEWAL

FINAL Permit No.: 0990045-005-AV

This permitting action is the routine renewal of the 5 year Title V Operation Permit (Permit Renewal) for the City of Lake Worth Facility that is comprised of the Tom G. Smith Power Plant and the Lake Worth Water Treatment Plant. The key changes in the present renewal compared with the previous one relate to the permanent retirement of several units as described below.

This Title V air operation permit renewal is issued by the Department of Environmental Protection (Department) 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.

Two small fossil fuel steam generators designated as S-1 and S-4, (Emissions Units 007 and 010) were permanently retired in 2005. Though retired, S-4 continues to be reported in the Title IV (Acid Rain) portion of the permit together with an active fossil fuel steam generator designated as S-3 and as Emissions Unit (EU) 009.

Following the retirement of S-1 and S-4, the facility now consists of eight regulated emission units with a total nominal generating capacity of 96 megawatts (MW). They are listed in the following table.

EU No.	Brief Description
001 to 005	Five 2000 kilowatts (2 MW) diesel engine generators that comprise a single MP 36 Power Pack. Each diesel generator is a model 567D4 manufactured by GM Electro Motive Division.
006	Gas Turbine # 1, (GT-1), nominally rated at 30 MW, 435 million Btu per hour (mmBtu/hr), capable of burning number 2 fuel oil, with emissions exhausted through a 46 foot 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.
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 (S-5) 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.

Individual usage of the eight units ranged from 8 to 775 hours of operation in 2006. Total combined hours of operation for the eight units equaled 1,087 hours. The units are primarily used for peaking purposes during the summer months. Usage has progressively declined since 2001 when total combined hours of operation of the eight units equaled 11,295 hours.

The compliance authority for the facility is the Palm Beach County Health Department, Air Quality Control Section. They conducted an inspection and determined that only EU009 (S-3) has permanent stack sampling facilities that are required in accordance with Rule 62-297.310(6)(a), F.A.C. Most of the units do not require annual testing due to minimal use.

EU011 (GT-2/S-5), the unit of greatest use (302 to 4,695 hours per year since 2001), is tested on a regular basis using temporary facilities such as a cherry picker. A compliance plan has been included (Appendix CP-1) that requires the applicant to install permanent stack sampling facilities or to apply for and obtain an alternative sampling plan (ASP) from the Department.

The facility has been assigned Department of Energy, Office of Regulatory Information Systems (ORIS) Code 0673. The present status of allowances is given in Section IV, Acid Rain Part, of the permit.

Based on the Permit Renewal application, this facility is not a major source of hazardous air pollutants (HAP).

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 Renewal
FINAL Permit No. 0990045-005-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: 850/921-9533

Compliance Authority:

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

Telephone: 561/840-4500
Fax: 561/355-2442

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Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

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

FINAL Permit No. 0990045-005-AV
Facility ID No. 0990045
SIC Nos.: 49, 4931
Project: Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V Air Operation Permit for the operation of the Tom G. Smith Power Plant and the Lake Worth Water Treatment Plant. This facility is located at 117 College Street, Lake Worth, Florida 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 CP-1, Compliance Plan
Acid Rain Part Application
Appendix U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix TV-6, Title V Conditions (version dated 6/23/06)
Appendix SS-1, Stack Sampling Facilities (version dated 10/07/96)
Table 297.310-1, Calibration Schedule (version dated 10/07/96)
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, 2008
Renewal Application Due Date: July 4, 2012
Expiration Date: December 31, 2012

Joseph Kahn, Director
Division of Air Resource Management

JK/tlv/aal/dlr

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Facility ID No. 0990045

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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; one Fossil Fuel Steam Generating Unit (S-3); one simple cycle Gas Turbine # 1, (GT-1); and one Combined Cycle Gas Turbine Unit, (GT-2/S-5). Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Two fossil fuel steam generators designated as S-1 and S-4, (Emissions Units 007 and 010) were permanently retired in 2005.

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, 2007, this facility is *not* a major source of hazardous air pollutants (HAP).

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.
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
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.

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Facility ID No. 0990045

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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:

Application (hard copy) for a Title V Air Operation Permit Renewal received on July 5, 2007.

DRAFT/PROPOSED Title V Air Operation Permit Renewal clerked on October 17, 2007.

Public Notice published on October 22, 2007.

Notification to U.S. EPA Region 4 of Publication of Public Notice dated November 3, 2007.

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Facility ID No. 0990045

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Section II. Facility-Wide Conditions.**The following conditions apply facility-wide:**

1. Appendix TV-6, Title V Conditions, is a part of this permit.
{Permitting note: Appendix TV-6, 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. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 1515
Lanham-Seabrook, MD 20703-1515
Telephone: 301/429-5018
- and,
- b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.
[40 CFR 68]
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. **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.

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

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- 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.]

8. 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]

9. 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.]

10. 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-6, Title V Conditions).}

11. 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
Post Office Box 29
West Palm Beach, Florida 33401
Phone: 561/840-4500

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Department of Environmental Protection
Southeast District Office, Air Section
Post Office Box 15425
West Palm Beach, Florida 33416
Phone: 561/681-6600

12. 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

13. 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.]

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Facility ID No. 0990045

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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:
- The number of hours each emissions unit operates every year; and
 - 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**.

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

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Subsection B. Reserved. Formerly Addressed Emissions Unit 007 (S-1). Retired August 18, 2005.

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

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Subsection C. This section addresses the following emissions unit.

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
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{Permitting note(s): This emissions unit is 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. The permittee reported it operates the following continuous monitors for Unit S-3: NOx, CO₂, and visible emissions. Emissions Unit 010 also known as S-4 was retired from service on August 18, 2005.}

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
		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.** 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.]
- 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 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-

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95 (or latest editions) to analyze a representative sample of the composite 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 a CEMS for emissions unit 009. See specific condition **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.** 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.16.** 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.**

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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
		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.

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- 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.** 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 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 composite 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.** NO_x Testing. Compliance with the NO_x 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 - NO_x 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**.

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Subsection E. Common Conditions.

E.U. ID No.	Brief Description
001 to 005	Five 2000 kW diesel engine generators
009	Fossil Fuel Steam Generating Unit 3 (S-3)
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 emission unit 009)** 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.

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- (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.

1. 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.
2. 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.

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- (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. (This condition is applicable only to emissions unit 009)

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. (This condition is applicable only to emissions units 006, 009, and 011.) 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 006 and 011.) Visible Emissions - Turbines. The test method for visible emissions for emissions units 006 (GT-1) and 011 (GT-2/S-5) 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]

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- E.10. (This condition is applicable only to emissions unit 009) Visible Emissions - Boilers.** The test method for visible emissions for emissions unit 009 (S-3) 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 unit 009) 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.]

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- 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.]

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- 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 unit 009) 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.

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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.]

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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 S-3

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 09/25/07.
[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

2. Sulfur dioxide (SO₂) allowance allocations for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	Year	2008	2009	2010	2011	2012
009	S-3	Table 2, 40CFR73	9*	9*	11*	11*	11*

* 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.]

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

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Subsection B. This subsection addresses the Retired Unit Exemptions under Acid Rain, Phase II.

The emissions unit listed below is regulated as *permanently retired units* under Phase II of the Federal Acid Rain Program.

E.U. ID No.	Description
010	Fossil Fuel Fired Steam Generator S-4 (Permanently Retired)

1. The "Retired Unit Exemption" form submitted for this facility constitutes a supplement to the Acid Rain Part application pursuant to 40 CFR 72.8 and is a part of this permit. The owners and operators of these acid rain units shall comply with the standard requirements and special provisions set forth in DEP Form No. 62-210.900(1)(a)3., dated April 16, 2001, and signed by the designated representative on June 29, 2007. This units are subject to the following: 40 CFR 72.1, which requires the unit to have an Acid Rain Part as part of its Title V permit; 40 CFR 72.2, which provides associated definitions; 40 CFR 72.3, which provides measurements, abbreviations, and acronyms; 40 CFR 72.4, which provides the federal authority of the Administrator; 40 CFR 72.5, which provides the authority of the states; 40 CFR 72.6, which makes the boiler a Phase II unit; 40 CFR 72.10, which gives the public access to information about this unit; and 40 CFR 72.13, which incorporates certain ASTM methods into 40 CFR Part 72. [Chapter 62-213, F.A.C. and Rule 62-214.340, F.A.C.]

2. Sulfur dioxide (SO₂) allowance allocations for the permanently retired Acid Rain units are as follows:

E.U. ID No.	EPA ID	Year	2008	2009	2010	2011	2012
010	S-4	Table 2, 40CFR73	80*	80*	80*	80*	80*

* The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the U.S. EPA 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.

a. No permit revision shall be required for increases 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 62-213.440(3), F.A.C.

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

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

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

4. The designated representative of these acid rain units applied for an exemption from the requirements of the Federal Acid Rain Program by submitting a completed and signed "Retired Unit Exemption" form (DEP Form No. 62-210.900(1)(a)3., F.A.C., attached) to the Department. The date of permanent retirement was January 1, 2002. [Rule 62-214.340(2), F.A.C.; and, 40 CFR 72.8.]

5. 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 CP-1, Compliance Plan

Background

This facility had a potential noncompliance issue identified at the time of its Title V air Operation permit renewal application (see below). This issue was reported by the Palm Beach County Health Departments' compliance personnel.

The potential noncompliance issue relates to the lack of permanent stack sampling platforms on some of this power generation facility's emissions units. Pursuant to Rule 62-297.310(6)(a), F.A.C., permanent stack sampling platforms are required at this facility to conduct annual compliance testing. In this case, annual testing for NOx emissions is required.

During the latest facility compliance inspection, inspection personnel noticed that permanent stack sampling facilities were not present on some of the emission units. There are no permanent stack sampling platforms on the following emissions units: the Combined Cycle Combustion Turbine (E.U. ID No. 11), the Diesel Generators (E.U. ID No. 001 to 005), and the Simple Cycle Combustion Turbine (E.U. ID No. U006). The Diesel Generators, which are peaking units, have historically rarely needed to have annual NOx emissions tests conducted because they have been operated less than 400 hours per year. Likewise the Simple Cycle Gas Combustion Turbine (E.U. ID No. 006) has predominately operated at 400 hours or less per year thus not requiring NOx emissions testing. The Combined Cycle Combustion Turbine (E.U. ID No. 011) has usually operated more than 400 hours per year and thus has required annual NOx emissions testing.

The diesel generators (E.U. ID No. 001 to E.U. ID No. 005) have been in operation since January of 1990. Both of the cited combustion turbines (E.U. ID No. 006 and E.U. ID No. 011) have been in operation since the 1970s. These turbine units were initially constructed and permitted in the 1970s and are not subject to NSPS. **At the time of construction and permitting, permanent stack sampling facilities were not required by rule.** Due to subsequent RACT rules for NOx emissions, a limit of 0.5 lb/MMBtu was imposed on these units (E.U. ID No. 006 and E.U. ID No. 011) with annual testing required when annual operations exceed 400 hours.

In the past, when 400 annual operational hours have been surpassed for any of the emissions units not having permanent stack sampling platforms, a temporary sampling platform (cherry picker) has been used. During the many years of operation of these emission units not having permanent stack sampling facilities this potential non-compliance issue has never been raised before.

Compliance Plan [Rule 62-213.440(2), F.A.C]

The permittee shall use one of the two options below to remedy this situation:

1. **Option-1:** Install permanent stack sampling facilities (platforms) on the Diesel Generators (E.U. ID No. 001 to E.U. ID No. 005), the Simple Cycle Combustion Turbine (E.U. ID No. 006), and the Combined Cycle Combustion Turbine (E.U. ID No. 011) prior to September 2008 when the next annual NOx emissions tests, if required, are scheduled to be conducted; or
2. **Option-2:** Obtain an Alternative Sampling Procedure (ASP) from the Department allowing the current annual NOx emissions testing procedures to be continued. To obtain an ASP, sufficient justification must be supplied to the Department to show why the applicable rule requirement should be waved.

On or before February 29, 2008 the permittee shall submit the request for the ASP to the Department. Submit the request to the attention of Mr. Errin Pichard, P.E., Emissions Monitoring Section, Bureau of Air Monitoring and Mobile Sources, 2600 Blair Stone Road, Tallahassee Florida 32399-2400. A copy of the request shall be submitted to the Bureau of Air

City of Lake Worth Utilities

DRAFT Permit No. 0990045-005-AV

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

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Regulation at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and to the compliance authority.

The ASP request and all associated submittals must be certified by the responsible official [Rule 62-213.420(4), F.A.C]

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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.
7. Diesel-fired generator
8. Diesel tank (6,000 gallons)
9. Mechanical draft cooling towers (2)

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Facility ID No. 0990045

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	11/06/92	10/30/97	
		AC 50-2168A	09/10/76	09/01/77	
		AC 50-2168	09/28/73	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	01/31/96	09/15/96	09/28/87 03/27/96
		PA - 74-05	05/18/76		
010	Fossil Fuel Steam Generator Unit #4 (S-4)	AO 50-169444	01/31/96	09/15/96	09/28/87 03/27/96
		PA - 74-05	05/18/76		
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	0990045-001-AO (amendment of AO 50-169444, AO 50-172357, AO 50-219177, for NOx RACT)	01/31/96		
	GT-1				
	S-1				
	S-3				
	S-4				
	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	
	All of the above plus shutdown of the SO ₂ CEMS on EU 009, Fossil Fuel Steam Generating Unit (S-3)	0990045-004-AV	01/01/03	12/31/07	09/19/05

ID Number Changes (for tracking purposes):

From: Facility ID No.: 50PMB500045

To: Facility ID No.: 0990045

* Units S-1, S-2 and S-4 are not in service. Operation of these units is not permitted by this permit.

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Facility ID No. 0990045

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			99.8	436.91	Rules 62-296.570., F.A.C.	A.2

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

City of Lake Worth Utilities

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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 → UNIT RETIRED FROM SERVICE PERMENENTLY ON AUGUST 18, 2005

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Facility ID No. 0990045

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 → UNIT RETIRED FROM SERVICE PERMENENTLY ON AUGUST 18, 2005							
			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 (EU 009)	142 (EU 009)	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)	426 (EU 009)	Rule 62-210.700(3), F.A.C.	C.7

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Facility ID No. 0990045

Table 1-1, Continued, Emissions Units 009

Pollutant	Fuel(s)	Hours per Year	Allowable Emissions			Equivalent Emissions ¹		Regulatory Citations	See Permit Condition(s)
			Standard(s)	lbs./hour	TPY	lbs./hour	TPY		
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)	712 (EU 009)	Rules 62- 296.570, F.A.C.	C.9

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Facility ID No. 0990045

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 ¹			
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
SO₂ (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
NO_x (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
NO_x (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)
NO _x	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: UNIT RETIRED FROM SERVICE PERMENENTLY ON AUGUST 18, 2005

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Facility ID No. 0990045

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 → UNIT RETIRED FROM SERVICE PERMENENTLY ON AUGUST 18, 2005					
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
NO _x (EU 009)	Oil, Natural Gas	CEMS	Continuous			Yes	C.13 & C.16
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)
SO₂ (Emissions Unit 011 only)	Oil, Natural Gas	Fuel sampling & analysis	Sampling daily, analysis of monthly composite			No	D.4, D.6 & D.7
NO_x	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

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Facility ID No. 0990045

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 ¹	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

Friday, Barbara

To: 'dmulvay@lakeworth.org'; Hoefert, Lee; 'James_Stormer@doh.state.fl.us'; 'sosbourn@golder.com'
Cc: Read, David
Subject: FINAL Title V Permit Renewal No.: 0990045-005-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant and Lake Worth Water Treatment Plant
Attachments: Acid rain form.pdf; 0990045-005-AV_renewal_Final.pdf; 0990045-005sob_Final.pdf; 0990045-005-NoticeofFinalPermit&FD.pdf; 0990045-005FinalPermitSignaturePage.pdf

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <http://www.adobe.com/products/acrobat/readstep.html>.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

DEP, Bureau of Air Regulation

12/21/2007

Friday, Barbara

From: System Administrator
To: Hoefert, Lee
Sent: Friday, December 21, 2007 12:18 PM
Subject: Delivered:FINAL Title V Permit Renewal No.: 0990045-005-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Your message

To: 'dmulvay@lakeworth.org'; Hoefert, Lee; 'James_Stormer@doh.state.fl.us'; 'sosbourn@golder.com'
Cc: Read, David
Subject: FINAL Title V Permit Renewal No.: 0990045-005-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant and Lake Worth Water Treatment Plant
Sent: 12/21/2007 12:18 PM

was delivered to the following recipient(s):

Hoefert, Lee on 12/21/2007 12:18 PM

Friday, Barbara

From: System Administrator
To: Read, David
Sent: Friday, December 21, 2007 12:18 PM
Subject: Delivered:FINAL Title V Permit Renewal No.: 0990045-005-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Your message

To: 'dmulvay@lakeworth.org'; Hoefert, Lee; 'James_Stormer@doh.state.fl.us'; 'sosbourn@golder.com'
Cc: Read, David
Subject: FINAL Title V Permit Renewal No.: 0990045-005-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant and Lake Worth Water Treatment Plant
Sent: 12/21/2007 12:18 PM

was delivered to the following recipient(s):

Read, David on 12/21/2007 12:18 PM

Friday, Barbara

From: Exchange Administrator
Sent: Friday, December 21, 2007 12:18 PM
To: Friday, Barbara
Subject: Delivery Status Notification (Relay)

Attachments: ATT122794.txt; FINAL Title V Permit Renewal No.: 0990045-005-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant and Lake Worth Water Treatment Plant



ATT122794.txt (296 B) FINAL Title V Permit Renewal N...

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

James_Stormer@doh.state.fl.us

Friday, Barbara

From: Read, David
To: Friday, Barbara
Sent: Friday, December 21, 2007 12:19 PM
Subject: Read: FINAL Title V Permit Renewal No.: 0990045-005-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Your message

To: 'dmulvay@lakeworth.org'; Hoefert, Lee; 'James_Stormer@doh.state.fl.us'; 'sosbourn@golder.com'
Cc: Read, David
Subject: FINAL Title V Permit Renewal No.: 0990045-005-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant and Lake Worth Water Treatment Plant
Sent: 12/21/2007 12:18 PM

was read on 12/21/2007 12:19 PM.

Friday, Barbara

From: Dave Mulvay [DMulvay@LakeWorth.org]
To: Friday, Barbara
Sent: Friday, December 21, 2007 12:18 PM
Subject: Read: FINAL Title V Permit Renewal No.: 0990045-005-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Your message

To: DMulvay@LakeWorth.org
Subject:

was read on 12/21/2007 12:18 PM.

Friday, Barbara

From: System Administrator
To: Dave Mulvay
Sent: Friday, December 21, 2007 12:19 PM
Subject: Delivered:FINAL Title V Permit Renewal No.: 0990045-005-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Your message

To: dmulvay@lakeworth.org; Hoefert, Lee; James_Stormer@doh.state.fl.us; sosbourn@golder.com
Cc: Read, David
Subject: FINAL Title V Permit Renewal No.: 0990045-005-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant and Lake Worth Water Treatment Plant
Sent: 12/21/2007 12:18 PM

was delivered to the following recipient(s):

Dave Mulvay on 12/21/2007 12:18 PM

Friday, Barbara

From: Mail Delivery System [MAILER-DAEMON@sophos.golder.com]
Sent: Friday, December 21, 2007 12:18 PM
To: Friday, Barbara
Subject: Successful Mail Delivery Report

Attachments: Delivery report; Message Headers



Delivery report.txt
(461 B)

Message
Headers.txt (2 KB)

This is the mail system at host sophos.golder.com.

Your message was successfully delivered to the destination(s) listed below. If the message was delivered to mailbox you will receive no further notifications. Otherwise you may still receive notifications of mail delivery errors from other systems.

The mail system

<sosbourn@golder.com>: delivery via 127.0.0.1[127.0.0.1]:10025: 250 OK, sent
476BF554_23095_114_1

Friday, Barbara

From: Osbourn, Scott [Scott_Osbourn@golder.com]
To: undisclosed-recipients
Sent: Friday, December 21, 2007 12:30 PM
Subject: Read: FINAL Title V Permit Renewal No.: 0990045-005-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Your message

To: Scott_Osbourn@golder.com
Subject:

was read on 12/21/2007 12:30 PM.

Friday, Barbara

From: James_Stormer@doh.state.fl.us
To: Friday, Barbara
Sent: Friday, December 21, 2007 1:03 PM
Subject: Read: FINAL Title V Permit Renewal No.: 0990045-005-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Your message

To: James_Stormer@doh.state.fl.us
Subject:

was read on 12/21/2007 1:03 PM.

Friday, Barbara

From: Hoefert, Lee
To: Friday, Barbara
Sent: Friday, December 21, 2007 1:49 PM
Subject: Read: FINAL Title V Permit Renewal No.: 0990045-005-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Your message

To: 'dmulvay@lakeworth.org'; Hoefert, Lee; 'James_Stormer@doh.state.fl.us'; 'sosbourn@golder.com'
Cc: Read, David
Subject: FINAL Title V Permit Renewal No.: 0990045-005-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant and Lake Worth Water Treatment Plant
Sent: 12/21/2007 12:18 PM

was read on 12/21/2007 1:49 PM.

Friday, Barbara

From: Hoefert, Lee
Sent: Friday, December 21, 2007 1:50 PM
To: Friday, Barbara
Subject: RE: FINAL Title V Permit Renewal No.: 0990045-005-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Lee C. Hoefert, P.E.
Air Program Administrator
Florida Department of Environmental Protection
Southeast District
400 N. Congress Ave., Suite 200
West Palm Beach, FL 33401
561-681-6626(Phone), 561-681-6790(Fax)

From: Friday, Barbara
Sent: Friday, December 21, 2007 12:18 PM
To: 'dmulvay@lakeworth.org'; Hoefert, Lee; 'James_Stormer@doh.state.fl.us'; 'sosbourn@golder.com'
Cc: Read, David
Subject: FINAL Title V Permit Renewal No.: 0990045-005-AV - City of Lake Worth Utilities - Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <http://www.adobe.com/products/acrobat/readstep.html>.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

DEP, Bureau of Air Regulation

12/21/2007