

# Department of Environmental Protection

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

Virginia B. Wetherell Secretary

#### **NOTICE OF FINAL PERMIT**

In the Matter of an Application for Permit by:

Mr. Harvey F. Wildschuetz Utilities Director Lake Worth Utilities 1900 2nd Avenue North Lake Worth, FL 33461 FINAL Permit No.: 0990045-002-AV Tom G. Smith Power Plant and Lake Worth Water Treatment Plant

Enclosed is FINAL Permit Number 0990045-002-AV for the operation of the Tom G. Smith Power Plant and Lake Worth Water Treatment Plant located at 117 South College Street, Lake Worth, Palm Beach County, issued pursuant to Chapter 403, Florida Statutes (F.S.).

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the permitting authority in the Legal Office; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the permitting authority.

Executed in Tallahassee, Florida.

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

IomgGT.Sffith, 829 Plant -Receipt Showing to & Date Delivered state, & ZIP Code +h. Florida Avenue . H œ Ē Lake Worth ID#0990045-Wildschuetz North S مَـ 3346 SENDER:

Complete items 1 and/or 2 for additional services:

Complete items 3, 4s, and 4b. Lalso wish to receive the. following services (for an Print your name and address on the reverse of this form so that we can return card to you.

Attach this form to the front of the mailpiece, or on the back if space does not extra fee): 1. Addressee's Address permit.

Write \*Return Receipt Requested\* on the mailpiece below the article number.

The Return Receipt will show to whom the article was delivered and the date delivered. 2. Restricted Delivery Consult postmaster for fee. 3. Article Addressed to: 4a. Article Number Mr. Harvey F. Wildschuetz Utilities Director 4b. Service Type Lake Worth Utilities ☐ Registered Certified 1900 2nd Avenue North ☐ Express Mail ☐ Insured Lake Worth, Florida 33461 ☐ Return Receipt for Merchandise ☐ COD 7. Date of Delivery 5. Received By: (Print Name) 8. Addressee's Address (Only if requested and fee is paid) 6. Signature: (Ad 1 11 1 11 1 1

Harvey

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Domestic Return Receipt

RETURN ADDRESS

PS Form 3800, April 1995

TAL Postage & Fees

dal Delivery Fee

PS Form **3811**, December 1994

FINAL Permit No.: 0990045-002-AV

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#### CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 12/2/97 to the person(s) listed or as otherwise noted:

Mr. Harvey F. Wildschuetz, Lake Worth Utilities \*

Mr. Albert D. Magley, Jr., P.E., Raytheon Engineers & Constructors, Inc.

Mr. William C. Michael, Lake Worth Utilities

Ms. Margaret Johnstone, Lake Worth Utilities

Mr. Isidore Goldman, P.E., DEP Southeast District

Mr. James Stormer, Palm Beach County Heath Department

Ms. Carla E. Pierce, USEPA, Region 4 (INTERNET E-mail Memorandum)

Ms. Yolanda Adams, USEPA, Region 4 (INTERNET E-mail Memorandum)

Clerk Stamp

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

#### FINAL PERMIT DETERMINATION

FINAL Permit No.: 0990045-002-AV

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#### I. Comments.

No comments were received from the City of Lake Worth on the PROPOSED permit. No comments were received from USEPA during their 45 day review period of the PROPOSED permit.

#### II. Title V Permitting Formats.

#### A. CHANGES TO TITLE V PERMITS ISSUED PRIOR TO 12/02/97

Title V permitting formats were updated due to recent rule changes and after considering comments received from the electric utilities. This permit reflects these changes. A brief summary of the changes is below.

- 1. Recent rule changes changed "exempt activities" to "insignificant activities." Rules 62-213.430(6), F.A.C. and 62-210, F.A.C., reflecting this change went into effect November 13, 1997.
- a. The department inserted a condition in Appendix TV-1 clarifying that a Title V source can add an "insignificant activity" at its facility in accordance with the criteria under Rule 62-213.430(6), F.A.C., and include it in the Title V permit's list of "insignificant activities" at the next renewal, in accordance with Rule 62-213.430(6), F.A.C. See condition number 40.
- **b.** Appendix E-1 has been changed to Appendix I-1, and the language of this appendix was revised to refer to insignificant emissions units where appropriate.
- c. Appendix U-1 has been revised to refer to insignificant emissions units instead of exempt emissions units.
- 2. Several changes were made to Appendix TV-1 to reflect the rule changes discussed above, and to properly identify conditions that are not federally enforceable.
- a. The following additional rules have been marked as "not federally enforceable":

62-4.030, F.A.C., General Prohibition, (see condition number 1.)

62-4.220, F.A.C., Operation Permit for New Sources, (see condition number 14.)

62-210.300(5), F.A.C., Notification of Startup, (see condition number 19.)

b. Appendix TV-1, now carries a version date of "12/02/97".

#### III. Conclusion.

In conclusion, the changes that have been made are insignificant in nature and do not impose additional noticing requirements. The permitting authority hereby issues the FINAL Title V permit, with any changes noted above.

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

Initial Title V Air Operation Permit FINAL Permit No.: 0990045-002-AV

#### Permitting Authority:

State of Florida

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Title V Section

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

Telephone: 850/488-1344 Fax: 850/922-6979

# Initial Title V Air Operation Permit FINAL Permit No.: 0990045-002-AV

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# Department of Environmental Protection

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

Virginia B. Wetherell Secretary

Permittee:

City of Lake Worth Utilities

FINAL Permit No.: 0990045-002-AV

Facility ID No.: 0990045

SIC Nos.: 49, 4931

Project: Initial Title V Air Operation Permit

This permit is for the operation of the Tom G. Smith Power Plant and Lake Worth Water Treatment Plant. This facility is located at 117 College Street, Lake Worth, FL 33461; UTM Coordinates: Zone 17, 592.8 km East and 2943.7 km North; Latitude: 26° 36' 45" North and Longitude: 80° 04' 04" West.

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

#### Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units and/or Activities Appendix I-1, List of Insignificant Emissions Units and/or Activities Appendix TV-1, Title V Conditions (version dated 12/02/97)
Appendix SS-1, Stack Sampling Facilities (version dated 10/07/96)
Table 297.310-1, Calibration Schedule (version dated 10/07/96)
Phase II Acid Rain Application/Compliance Plan received 07/01/95
Alternate Sampling Procedure: ASP Number 97-B-01
Scrivener's Order dated July 9, 1997 correcting ASP 97-B-01
Order Extending Permit Expiration Date (dated 11/04/97)

Effective Date: January 1, 1998

Renewal Application Due Date: July 5, 2002

Expiration Date: December 31, 2002

for

Howard L. Rhodes, Director Division of Air Resources

Management

HLR/sms/jk

City of Lake Worth Utilities FINAL Permit No.: 0990045-002-AV Tom G. Smith Power Plant and Lake Worth Water Treatment Plant Page 2 of 24

#### Section I. Facility Information.

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#### Subsection A. Facility Description.

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

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

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

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

Based on the initial Title V permit application received June 13, 1996, this facility is not a major source of hazardous air pollutants (HAPs).

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

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

City of Lake Worth Utilities FINAL Permit No.: 0990045-002-AV Tom G. Smith Power Plant and Lake Worth Water Treatment Plant Page 3 of 24

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

#### Subsection C. Relevant Documents.

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

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

These documents are on file with the permitting authority: Initial Title V Permit Application received June 13, 1996 Additional Information Request dated May 5, 1997 Additional Information Response received July 31, 1997

City of Lake Worth Utilities FINAL Permit No.: 0990045-002-AV Tom G. Smith Power Plant and Lake Worth Water Treatment Plant Page 4 of 24

#### Section II. Facility-wide Conditions.

#### The following conditions apply facility-wide:

- 1. APPENDIX TV-1, TITLE V CONDITIONS, is a part of this permit. {Permitting note: APPENDIX TV-1, 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. <u>Prevention of Accidental Releases (Section 112(r) of CAA)</u>. If required by 40 CFR 68, the permittee shall submit to the implementing agency:
  - a. a risk management plan (RMP) when, and if, such requirement becomes applicable; and
- b. certification forms and/or RMPs according to the promulgated rule schedule. [40 CFR 68]
- 5. <u>Insignificant Emissions Units and/or Activities.</u> 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.]
- 6. 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. Immediately 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.]

City of Lake Worth Utilities FINAL Permit No.: 0990045-002-AV Tom G. Smith Power Plant and Lake Worth Water Treatment Plant Page 5 of 24

- 7. Not Federally Enforceable. <u>Unconfined Particulate Matter</u>. 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 as needed.
  - 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.; Items 7.g. & h. proposed by applicant in the Additional Information Response received July 31, 1997]

{Note: This condition implements the requirements of Rules 62-296.320(4)(c)1., 3., & 4. F.A.C. (condition 58 of Appendix TV-1, dated 12/02/97).}

- 8. When appropriate, any recording, monitoring or reporting requirements that are time-specific shall be in accordance with the effective date of this permit, which define day one. [Rule 62-213.440, F.A.C.]
- 9. <u>Submittals</u>. 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 PO Box 29 West Palm Beach, FL 33402-0029

Phone: 561/355-3070

Department of Environmental Protection Southeast District Office, Air Section PO Box 15425 West Palm Beach, FL 33416 Phone: 561/681-6600 City of Lake Worth Utilities FINAL Permit No.: 0990045-002-AV Tom G. Smith Power Plant and Lake Worth Water Treatment Plant Page 6 of 24

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 Operating Permits Section 61 Forsyth Street Atlanta, GA 30303 Phone: 404/562-9099 Fax: 404/562-9095

For Acid Rain submittals, submittals should be sent to:

United States Environmental Protection Agency Region 4 Air, Pesticides & Toxics Management Division Acid Rain Section 61 Forsyth Street Atlanta, GA 30303

10. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. {See condition No. 52., Appendix TV-1, Title V Conditions} [Rule 62-214.420(11), F.A.C.]

City of Lake Worth Utilities FINAL Permit No.: 0990045-002-AV Tom G. Smith Power Plant and Lake Worth Water Treatment Plant Page 7 of 24

#### Section III. Emissions Unit(s) and Conditions.

#### Subsection A. This section addresses the following emissions units.

E.U. ID	
No.	Brief Description
001 -	Five 2000 kW diesel engine generators, an MP 36 Power Pack; each diesel
005	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.}

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**

{Note: Emissions units 001 through 005 are also subject to the visible emissions standard of specific condition 3 of this permit.}

A.2. <u>NOx RACT</u>. 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. [Rule 62-296.570, F.A.C.]

#### **Monitoring of Operations**

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

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

City of Lake Worth Utilities FINAL Permit No.: 0990045-002-AV Tom G. Smith Power Plant and Lake Worth Water Treatment Plant Page 8 of 24

#### Record Keeping and Reporting Requirements

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

#### **Common Conditions**

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

City of Lake Worth Utilities FINAL Permit No.: 0990045-002-AV

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

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#### Subsection B. This section addresses the following emissions unit.

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

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

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

#### Essential Potential to Emit (PTE) Parameters

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

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

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

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

#### **B.3.** Methods of Operation. Fuels.

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

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

#### **Emission Limitations and Standards**

- **B.4.** <u>Visible Emissions</u>. Visible emissions shall not exceed 20 percent opacity, except for one two-minute period per hour during which opacity shall not exceed 40 percent. [Rule 62-296.406(1), F.A.C.]
- **B.5.** <u>Visible emissions Soot Blowing and Load Change</u>. Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

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

City of Lake Worth Utilities FINAL Permit No.: 0990045-002-AV Tom G. Smith Power Plant and Lake Worth Water Treatment Plant Page 10 of 24

- **B.6.** Particulate Matter. Particulate matter emissions shall be controlled by the firing of natural gas and/or low sulfur content liquid fuel. See specific condition **B.7**. [Rules 62-4.070(3) and 62-296.406(2), F.A.C.]
- **B.7.** Sulfur Dioxide Sulfur Content. The No. 6 fuel oil sulfur content shall not exceed 2.25 percent, by weight. See specific condition **B.10**. [Rules 62-4.070(3) and 62-296.406(3), F.A.C.; BACT for this unit assumed to equal the sulfur limit established by PPSC No. PA 74-05 for units S-3 and S-4]
- **B.8.** NOx RACT. Emissions of nitrogen oxides (NOx) from these emissions units shall not exceed 0.50 pounds per million Btu while firing natural gas or number 6 fuel oil. [Rule 62-296.570, F.A.C.]

#### **Test Methods and Procedures**

- **B.9.** Sulfur Dioxide Sulfur Content. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by fuel sampling and analysis. See specific conditions **B.7.** and **B.10**. [Rules 62-213.440 and 62-296.406(3), F.A.C.]
- **B.10.** Fuel Sampling & Analysis Sulfur. For this emissions unit, the following fuel sampling and analysis protocol shall be used to demonstrate compliance with the fuel sulfur limitation of specific condition B.7 of this permit:
  - a. Sample the as-fired fuel oil each day fuel oil is fired.
- b. Composite the daily samples and each month determine and record the as-fired fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-94, ASTM D4294-90(95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95 (or latest editions) to analyze a representative sample of the composited as-fired fuel oil. [Rules 62-4.070(3) and 62-213.440, F.A.C.]
- **B.11.** NOx Testing. Compliance with the NOx emission limitation shall be demonstrated by annual emission testing in accordance with EPA Test Method 7E. [Rule 62-296.570, F.A.C.]

#### **Monitoring of Operations**

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

#### **Common Conditions**

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

City of Lake Worth Utilities FINAL Permit No.: 0990045-002-AV Tom G. Smith Power Plant and Lake Worth Water Treatment Plant Page 11 of 24

#### Subsection C. This section addresses the following emissions units.

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

{Permitting note(s): The emissions units are regulated under Acid Rain, Phase II, Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input, and Rule 62-296.570, F.A.C., NOx RACT, Power Plant Siting Certification No. PA 74-05, and the modified conditions of PA 74-05 ordered September 28, 1987. Fossil fuel fired steam generator Unit 3 (S-3) began commercial operation in 1966; and, fossil fuel fired steam generator Unit 4 (S-4) began commercial operation in 1970. The permittee reported it operates the following continuous monitors for Unit S-3: SO<sub>2</sub>, NOx, CO<sub>2</sub>, flow, visible emissions, and temperature.}

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

#### Essential Potential to Emit (PTE) Parameters

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

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

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

**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**

C.4. <u>Visible Emissions</u>. 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

City of Lake Worth Utilities FINAL Permit No.: 0990045-002-AV Tom G. Smith Power Plant and Lake Worth Water Treatment Plant Page 12 of 24

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

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

(The following paragraph is applicable to emissions unit 009 (Unit S-3) and will become applicable to emissions unit 010 (Unit S-4) only upon installation of an operational continuous opacity monitor at Unit S-4.) Visible emissions above 60 percent opacity shall be allowed for not more than 4, six (6)-minute periods, during the 3-hour period of excess emissions allowed by this condition.

[Rule 62-210.700(3), F.A.C., Note: Unit S-3 has an operational continuous opacity monitor. Unit S-4 may install an operational continuous opacity monitor in the future, and at that time be allowed visible emissions greater than 60% opacity pursuant to Rule 62-210.700(3), F.A.C., and specific condition C.5 of this permit.]

- C.6. <u>Particulate Matter</u>. 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. <u>Particulate Matter Soot Blowing and Load Change</u>. 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. <u>Sulfur Dioxide Sulfur Content</u>. 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. [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, 15, 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.]

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- C.11. <u>Sulfur Dioxide Sulfur Content</u>. 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. <u>Fuel Sampling & Analysis Sulfur</u>. 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 D129-95 (or latest editions) to analyze a representative sample of the composited as-fired fuel oil. Each composite sample shall also be analyzed for heating value.
  - c. Record monthly the amount of each fuel fired, and maintain records of the monthly analyses of the heating value of each fuel, and the percent sulfur content by weight of each fuel, to enable calculations of sulfur dioxide emissions.

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

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

[Rule 62-296.570, F.A.C.]

#### Monitoring of Operations

- C.14. Annual Tests Required PM and VE. Except as provided in specific conditions E.6 through E.8 of this permit, emission testing for particulate matter emissions and visible emissions shall be performed annually, no later than the end of each federal fiscal year (September 30), except for units that are not operating because of scheduled maintenance outages and emergency repairs, which will be tested within thirty days of returning to service. [Rules 62-4.070(3) and 62-213.440, F.A.C.]
- C.15. Annual NOx Tests Required Unit 4 (S-4, Emissions Unit 010). For emissions unit 010, emission testing for NOx shall be performed annually, no later than the end of each federal fiscal year (September 30), except for units that are not operating because of scheduled maintenance outages and emergency repairs, which will be tested within thirty days of returning to service. 'Annual compliance testing while firing oil is not required for units that operated on oil for less than 400 hours in the previous federal fiscal year (ending September 30th).

Should the owner or operator install a continuous emission monitoring system (CEMS) for NOx emissions at emission unit 010, compliance with the NOx limitation shall be demonstrated with the CEMS. Compliance shall be based on a 30-day rolling average. The CEMS shall be properly maintained and operated and shall meet the performance specifications of 40 CFR 60,

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Appendix B, or 40 CFR 75. The CEMS data shall be maintained on site for inspection by the Department.

[Rules 62-4.070(3), 62-213.410, F.A.C. and 62-296.570(4)(a)3. & 4.]

C.16. NOx CEMS Required - Unit 3 (S-3. Emissions Unit 009). For emissions unit 009, compliance with the NOx limitation shall be demonstrated with a continuous emission monitoring system (CEMS). Compliance shall be based on a 30-day rolling average, excluding periods of startup, shutdown or malfunction as provided by Rule 62-210.700, F.A.C. The CEMS shall be properly maintained and operated and shall meet the performance specifications of 40 CFR 60, Appendix B, or 40 CFR 75. The CEMS data shall be maintained on site for inspection by the Department and need not be submitted to the Department unless specifically requested. [Rules 62-4.070(3), 62-213.440, F.A.C. and 62-296.579(4)(a)4., and request of applicant]

#### **Common Conditions**

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

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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.}

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

#### Essential Potential to Emit (PTE) Parameters

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

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

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

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

#### **D.3.** Methods of Operation - Fuels.

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

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

#### **Emission Limitations and Standards**

{Note: Emissions unit 006 is also subject to the visible emissions standard of specific condition 3 of this permit.}

**D.4.** Sulfur Dioxide - Sulfur Content - Emissions Unit 011. For emissions unit 011 (Unit GT-2/S-5), the No. 2 fuel oil sulfur content shall not exceed 0.35 percent, by weight. See specific condition **D.6**.

[Rules 62-4.070(3) and 62-213.440, F.A.C., and Power Plant Siting Certification No. PA 74-05]

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

#### Test Methods and Procedures

**D.6.** <u>Sulfur Dioxide - Sulfur Content - Emissions Unit 011</u>. 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.** <u>Fuel Sampling & Analysis Sulfur Emissions Unit 011</u>. For each emissions unit, the following fuel sampling and analysis protocol shall be used to demonstrate compliance with the fuel sulfur limitation of specific condition **D.4** of this permit:
  - a. Sample the as-fired fuel oil each day fuel oil is fired.
  - b. Composite the daily samples and each month determine and record the as-fired fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-94, ASTM D4294-90(95), ASTM D1552-95, ASTM D1266-91, or both ASTM D4057-88 and ASTM D129-95 (or latest editions) to analyze a representative sample of the composited as-fired fuel oil. Each composite sample shall also be analyzed for heating value.
  - c. Record monthly the amount of each fuel fired, and maintain records of the monthly analyses of the heating value of each fuel, and the percent sulfur content by weight of each fuel, to enable calculations of sulfur dioxide emissions.

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

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

#### **Monitoring of Operations**

- **D.9.** Annual Tests Required NOx and VE. Except as provided in specific conditions **E.6** through **E.8** of this permit, emission testing for nitrogen oxide emissions and visible emissions shall be performed annually, no later than the end of each federal fiscal year (September 30), 'except for units that are not operating because of scheduled maintenance outages and emergency repairs, which will be tested within thirty days of returning to service. Annual compliance testing while firing oil is not required for units that operated on oil for less than 400 hours in the previous federal fiscal year (ending September 30th). [Rules 62-4.070(3) and 62-213.440, F.A.C.]
- 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 -	Five 2000 kW diesel engine generators
005	
007	Fossil Fuel Steam Generating Unit 1 (S-1)
009	Fossil Fuel Steam Generating Unit 3 (S-3)
010	Fossil Fuel Steam Generating Unit 4, (S-4)
006	Gas Turbine # 1, (GT-1)
011	Combined Cycle Unit, (GT-2/S-5)

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

#### Essential Potential to Emit (PTE) Parameters

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

#### **Emission Limitations and Standards**

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

#### **Excess Emissions**

- **E.2.** (This condition is applicable only to emissions units 001 005, 006 and 011.) Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided (1) that best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- E.3. (This condition is applicable only to emissions units 007, 009 and 010.) Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

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

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

{Permitting Note: The permittee and the Department agree that the CEMS used for the federal Acid Rain Program conservatively overestimates the heat input rate for Unit S-3 (emissions unit 009). The monitoring data for heat input is therefore not appropriate for purposes of compliance, including annual compliance certifications.}

[Rules 62-297.310(5) and 62-213.440, F.A.C., and request of applicant]

- **E.6.** Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
- (a) General Compliance Testing.
  - 2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid and/or solid fuel for more than 400 hours other than during startup.
  - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
    - a. Did not operate; or
    - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.

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- 4. During each federal fiscal year (October 1 -- September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
  - a. Visible emissions, if there is an applicable standard;
  - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
- 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
- 8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
- 9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- (b) <u>Special Compliance Tests</u>. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.
- (c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.]
- **E.7.** When PM Tests Not Required. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units while burning:
  - a. only gaseous fuel(s); or
  - b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

  [Rules 62-297.310(7)(a)3. & 5., F.A.C.; and, ASP Number 97-B-01.]
- **E.8.** When VE Tests Not Required. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
  - a. only gaseous fuel(s); or

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- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year. [Rule 62-4.070(3), F.A.C.]

#### **Test Methods and Procedures**

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

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

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

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

[Rule 62-296.405(1)(e)1., F.A.C.]

- E.11. (This condition is applicable only to emissions units 007, 009 and 010.) <u>DEP Method</u> 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

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of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value.

[Rule 62-297.401, F.A.C.]

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

[Rule 62-297.310(1), F.A.C.]

- **E.13.** Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
- **E.14.** Operating Rate During Testing. Testing of emissions shall be conducted with each emissions unit operation 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

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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) <u>Minimum Sample Volume</u>. 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) <u>Calibration of Sampling Equipment</u>. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]
- E.16. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit. Temporary stack sampling facilities under Rule 62-297.310(6)(b), F.A.C. may be used in lieu of permanent facilities. [Rule 62-297.310(6), F.A.C.]

#### Record Keeping 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.]

1 1 . .

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

#### E.19. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Palm Beach County Health Department's Air Section on the results of each such test.
- (b) The required test report shall be filed with the Palm Beach County Health Department's Air Section as soon as practical but no later than 45 days after the last sampling run of each test is completed.

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- (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.

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- 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
- 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
- 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
- 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
- 8. The date, starting time and duration of each sampling run.
- 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- 10. The number of points sampled and configuration and location of the sampling plane.
- 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- 12. The type, manufacturer and configuration of the sampling equipment used.
- 13. Data related to the required calibration of the test equipment.
- 14. Data on the identification, processing and weights of all filters used.
- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated
- 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.]

City of Lake Worth Utilities

FINAL Permit No.: 0990045-002-AV

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

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5 1 7 L

Section IV. This section is the Acid Rain Part.

Operated by:

City of Lake Worth

ORIS code:

0673

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

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

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

A.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: DEP Form No. 62-210.900(1)(a), dated 07/01/95. [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO<sub>2</sub>) allowance allocations for each Acid Rain unit are as follows:

E.U. ID					
No.	EPA ID	Year	2000	2001	2002
009	S-3	SO2 allowances,			
		under Table 2 or 3 of			
		40 CFR Part 73	9*	9*	9*
010	S-4	SO2 allowances,			
		under Table 2 or 3 of			
		40 CFR Part 73	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 USEPA under Table 2 or 3 of 40 CFR 73.
- A.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.]
- A.4. Fast-Track Revisions of Acid Rain Parts. Those Acid Rain sources making a change described at Rule 62-214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, Fast-Track Revisions of Acid Rain Parts. [Rule 62-213.413, F.A.C.]
- A.5. Comments, notes, and justifications: None.

# Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 02/05/97)

#### Abbreviations and Acronyms:

°F: Degrees Fahrenheit

BACT: Best Available Control Technology

CFR: Code of Federal Regulations

**DEP:** State of Florida, Department of Environmental Protection

DARM: Division of Air Resource Management

EPA: United States Environmental Protection Agency

F.A.C.: Florida Administrative Code

F.S.: Florida Statute

ISO: International Standards Organization

LAT: Latitude LONG: Longitude

MMBtu: million British thermal units

MW: Megawatt

ORIS: Office of Regulatory Information Systems

SOA: Specific Operating Agreement UTM: Universal Transverse Mercator

#### Citations:

The following examples illustrate the methods used in this permit to abbreviate and cite the references of rules, regulations, guidance memorandums, permit numbers, and ID numbers.

#### Code of Federal Regulations:

Example: [40 CFR 60.334]

Where: 40 reference to Title 40

CFR reference to Code of Federal Regulations

60 reference to Part 60

60.334 reference to Regulation 60.334

#### Florida Administrative Code (F.A.C.) Rules:

Example: [Rule 62-213, F.A.C.]

Where: 62 reference to Title 62

62-213 reference to Chapter 62-213

62-213.205 reference to Rule 62-213.205, F.A.C.

ISO: International Standards Organization refers to those conditions at 288 degrees K, 60 percent relative humidity, and 101.3 kilopascals pressure.

# Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (continued)

#### **Identification Numbers:**

#### Facility Identification (ID) Number:

Example: Facility ID No.: 1050221

Where:

105 = 3-digit number code identifying the facility is located in Polk County

0221 = 4-digit number assigned by state database.

#### Permit Numbers:

Example: 1050221-002-AV, or

1050221-001-AC

Where:

AC = Air Construction Permit

AV = Air Operation Permit (Title V Source)

105 = 3-digit number code identifying the facility is located in Polk County

0221 = 4-digit number assigned by permit tracking database

001 or 002 = 3-digit sequential project number assigned by permit tracking

database

Example: PSD-FL-185

PA95-01

AC53-208321

Where:

PSD = Prevention of Significant Deterioration Permit

PA = Power Plant Siting Act Permit

AC = old Air Construction Permit numbering

City of Lake Worth Utilities FINAL Permit No.: 0990045-002-AV

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

Facility ID No.: 0990045

#### 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, are exempt from the permitting requirements of Chapters 62-210 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 Rule 62-210.300(3)(a), 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 Rule 62.210.300(3)(a), 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

City of Lake Worth Utilities

FINAL Permit No.: 0990045-002-AV

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.			Issue	Expiration	Extended	Revised
ID No.	Description	Permit No.	Date	Date	Date <sup>1, 2</sup>	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	AO 50-219177	11/06/92	10/30/97		
	(GT-1)	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 PA - 74-05	01/31/96 05/18/76	09/15/96		09/28/87 03/27/96
010	Fossil Fuel Steam Generator Unit #4 (S-4)	AO 50-169444 PA - 74-05	01/31/96 05/18/76	09/15/96		09/28/87 03/27/96
011	Combined Cycle Gas Turbine (GT-2/S-5)	PA - 74-05	05/18/76			09/28/87 03/27/96
001 - 005, 006, 007, 009,	Diesel engine generators #1 - 5 GT-1 S-1 S-3	0990045-001-AO (amendment of AO 50-169444, AO 50- 172357, AO 50- 219177, for NOx RACT)	01/31/96		·	
	S-4	10.01)				

#### ID Number Changes (for tracking purposes):

From: Facility ID No.: 50PMB500045

To: Facility ID No.: 0990045

#### Notes:

- 1 AO permit(s) automatic extension(s) in Rule 62-210.300(2)(a)3.a., F.A.C., effective 03/21/96.
- 2 AC permit(s) automatic extension(s) in Rule 62-213.420(1)(a)4., F.A.C., effective 03/20/96.

{Rule 62-213.420(1)(b)2., F.A.C., effective 03/20/96, allows Title V Sources to operate under existing valid permits}

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

City of Lake Worth Utilities

FINAL Permit No.: 0990045-002-AV

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

Facility ID No.: 0990045

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

<u>Unregulated Emissions Units and/or Activities</u>. 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.					

<sup>\*</sup> 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.

**FINAL Permit No.:** 0990045-002-AV

Facility ID No.: 0990045

#### Appendix S Permit Summary Tables

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			
Pollutant	Fuel(s)	Hours	Standard(s)	lbs./hour	TPY	lbs:/hour TPY	Regulatory	See Permit	
		per Year					Citations	Condition(s)	
VE	Diesel	8760	20% opacity		_		Rule 62-	Section II,	
	Fuel						296.320(4)(b),	Condition 3	
							F.A.C.		
NOx	Diesel	8760	4.75 lb/mmBtu			99.8 436.91		A.2	
	Fuel	· ·					296.570., F.A.C.		

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

Facility ID No.: 0990045

Table 1-1, Continued

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

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

<sup>\*</sup> Equivalent emissions are for SO<sub>2</sub> emissions firing fuel oil.

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

			Allowable Emissions	•		Equivalent Emissions			
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lbs./hour	TPY	lbs./hour	TPY	Regulatory Citations	See Permit Condition(s)
VE	Oil,	8760	20% opacity, except for 40%				200 A	Rule 62-	C.4
Steady	Natural		for 2 min. each hour					296.405(1)(a),	
State	Gas							F.A.C.	
VE	Oil,	8760	60 % opacity					Rule 62-	C.5
Soot	Natural		(>60% opacity for not inore					210.700(3),	
Blowing or	Gas		than 4, six-minute periods)					F.A.C.	
Load								•	
Change									
PM	Oil,	8760	0.1 lb/mmBtu			33	142	Rule 62-	C.6
Steady	Natural					TO SECURE TO VERSION OF THE PARTY OF THE PAR	*(EU 009)*	296.405(1)(b),	
State	Gas						184	F.A.C.	
							(EU 010)		
PM	Oil,	8760	0.3 lb/mmBtu				<b>2</b> , 426	Rule 62-	C.7
Soot	Natural					(EU 009)	(EU 009).	210.700(3),	
Blowing or	Gas				•	653000000000000000000000000000000000000	552	F.A.C.	
Load						(EU 010)	(EU 010)		
Change									

Facility ID No.: 0990045

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

			Allowable Emissions			Equivalent Emissions			
Pollutant	Fuel(s)	Hours	Standard(s)	lbs./hour	TPY	lbs./hour	TPY	Regulatory	See Permit
		per Year						Citations	Condition(s)
SO <sub>2</sub>	Oil,	8760	2.25% S by weight, fuel oil			832	1072	Rule 62-213.440,	C.8
	Natural					(EU 009)	(EU 009)	F.A.C. & PPSC	
	Gas					(oil)	(oil)	No. PA 74-05	
						1072	4695		
						(EU 010)	(EU 010)		
							(oil)		
NOx	Oil,	8760	0.5 lb/mmBtu			ESSENCE TO CONTRACT OF STREET AND STREET	712 (EU	· ·	C.9
	Natural					009)	009)	296.570, F.A.C.	
	Gas						918 (EU		
						010)	010)		

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			
Pollutant	Fuel(s)	Hours per Year	Standard(s)	lbs./hour	TPY	lbs./hour	ТРҮ	Regulatory Citations	See Permit Condition(s)
VE	Oil <sup>a</sup> , Natural Gas <sup>b</sup>	8760	20% Opacity		_	K		Rule 62- 296.320(4)(b), F.A.C.	Section II, Condition 3
SO <sub>2</sub> (EU 011 only)	Oil, Natural Gas	8760	0.35% S by weight, fuel oil			196 See 1961 . See 196 March 200 P	478 ((oil)	Rule 62-213.440, F.A.C. & PPSC No. PA 74-05	D.4
NOx (EU 006)	Oil <sup>a</sup> , Natural Gas <sup>b</sup>	8760	0.90 lb/mmBtu (fuel oil) 0.50 lb/mmBtu (natural gas)			392 218	1715 953	Rules 62-570, F.A.C.	D.5
NOx (EU 011)	Oil <sup>a</sup> , Natural Gas <sup>b</sup>	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.

Facility ID No.: 0990045

## Appendix S Permit Summary Tables

## Table 1-1, Continued

Emission	s Unit	Brief Desc	Brief Description							
012	,	Fuel oil sto Subpart Kl	orage tanks (tanks 10 & 11, both	20,134 gallo	ns capacity	, and tank 12, 140,785 gall	ons capacity) sub	ject to NSPS,		
	·		Allowable Emissions	• .		Equivalent Emissions!				
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:

<sup>&</sup>lt;sup>1</sup> The "Equivalent Emissions" listed are for informational purposes only.

Facility ID No.: 0990045

## Appendix S Permit Summary Tables

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 - 005	Five 2000 kW diesel engine generators

Pollutant or	Fuel(s)	Compliance	Testing	Frequency	Minimum	CMS <sup>2</sup>	See Permit
Parameter		Method	Frequency	Base Date <sup>1</sup>	Compliance Test		Condition(s)
					Duration		
NOx	Diesel	EPA Test Method 7E	Annual	February	3 hours	No	A.3 & A.4
	Fuel			28th			
VE	Diesel	EPA Method 9	Annual	February	30 min.	No	A.4 & E.9
	Fuel			28th			

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

Pollutant or	Fuel(s)	Compliance	Testing	Frequency	Minimum	CMS <sup>2</sup>	See Permit
Parameter		Method	Frequency	Base Date <sup>1</sup>	Compliance Test	•	Condition(s)
					Duration		
SO <sub>2</sub>	Oil, Natural Gas	Fuel sampling & analysis	Sampling daily, analysis of monthly composite			No	B.7, B9 & B.10
NOx	Oil, Natural Gas	EPA Test Method 7E	Annual	February 28th	3 hours	No	B.11 & B.12
VE	Oil, Natural Gas	DEP Method 9	Annual	February 28th	1 hour	No	B.12 & E.10

Facility ID No.: 0990045

## Appendix S Permit Summary Tables

Table 2-1, Continued

Emission	s 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 of natural gas and number 6 fuel oil	-4), nominally rated a	t 33 MW, 419.1	mmBtu/hr, capable	of burning	any combination	
Pollutant or Parameter	Fuel(s)	Compliance Method	Testing Frequency	Frequency Base Date <sup>1</sup>	Minimum Compliance Test Duration	CMS <sup>2</sup>	See Permit Condition(s)	
SO <sub>2</sub>	Oil, Natural Gas	Fuel sampling & analysis	Sampling daily, analysis of monthly composite			No <sup>a</sup>	C.8, C.11 & C.12	
NOx (EU 009)	Oil, Natural Gas	CEMS	Continuous			Yes	C.13 & C.16	
NOx (EU 010)	Oil, Natural Gas	EPA Test Method 7E (If CEMS installed see next row)	Annual	February 28th	3 hours	No	C.13 & C.15	
NOx (EU 010)	Oil, Natural Gas	CEMS (If installed)	Continuous			Yes, if installed for Acid Rain	C.13 & C.15	
PM	Oil, Natural Gas	EPA Test Methods 17,5,5B or 5F	Annual	Februrary	3 hours	No .	C.10 & C.14	
VE	Oil, Natural Gas	DEP Method 9	Annual	February 28th	l hour	Yes	C.14 & E.10	

Note for EU 009 & 010:

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

Facility ID No.: 0990045

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	Fuel(s)	Compliance	Testing	Frequency	Minimum	CMS <sup>2</sup>	See Permit
Parameter		Method	Frequency	Base Date <sup>1</sup>	Compliance Test		Condition(s)
					Duration		
SO <sub>2</sub>	Oil,	Fuel sampling & analysis	Sampling daily,			No	D.4, D.6 & D.7
(Emissions	Natural		analysis of				
Unit 011	Gas		monthly				
only)			composite				
NOx	Oil,	EPA Test Method 7E	Annual	February	3 hours	No	D.8 & D.9
	Natural	·		28th			
	Gas						
VE	Oil,	EPA Method 9	Annual	February	1 hour	No	D.9 & E.9
	Natural			28th			
	Gas			<u> </u>			

Facility ID No.: 0990045

## Appendix S **Permit Summary Tables**

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	Fuel(s)	Compliance	Testing	Frequency	Minimum	CMS <sup>2</sup>	See Permit
Parameter		Method	Frequency	Base Date	Compliance Test		Condition(s)
			•		Duration		
Capacity		Record keeping					F.2 & F.3

### Notes for all tables:

<sup>&</sup>lt;sup>1</sup> Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C. <sup>2</sup> CMS = continuous monitoring system

Appendix TV-1, the Title V Core Conditions, has been provided only to the applicant. The most recent version of these conditions may be obtained from the Department's Internet Web site at:

http://www.dep.state.fl.us/air/

If you do not have access to the Internet and would like a copy of Appendix TV, please contact Joseph Kahn, P.E., Department of Environmental Protection, Division of Air Resources Management, Bureau of Air Regulation, Mail Station 5505, 2600 Blair Stone Road, Tallahassee, FL 32399-2400, 850/488-1344.

An electronic version of this permit is also available from the Department's Internet Web site above.

## Phase II Permit Application

Compliance

Page 1

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

This submission is: X New Revised

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

Tom G. Smith	FL	673
Plant Name	State	ORIS Code

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

	Pli	sn		
8	ь	c	d	. · <b>e</b>
Boiler ID#	Unit Will Hold Allow- ances in Accordance with 40 CFR 72.9(c)(1)	Repowering Plan	New Units  Commence Operation Date	New Units  Monitor Certification Deadline
S-3	Yes	NO		
S-4	Yes	NO		
	Yes	· ·	·	
	Yes			
	ae Y	<del></del> .		
	Yes			
	Yes			•
	Yes			
	Yes			
	Yes	·		
	Yes	,		
	Yes			

STEP 3 / Check the box if the response in column c of Step 2 is "Yes" for any unit For each unit that will be repowered, the Repowering Extension Plan form is included and the Repowering Technology Petition form has been submitted or will be submitted by June 1, 1997.

DEP Form No. 62-210.900(1)(a) - Form

Effective: 7-1-95

Plant Name (from Step 1)

#### Recordkeeping and Reporting Requirements (cont.)

- (iv) Copies of all documents used to complete an Acid Rain part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

#### Liability.

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain part application, an Acid Rain part, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
  (5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision

applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.

- (6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 75, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

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

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

#### Certification

I am authorized to make this submission on behalf of the owners and operators of the or Acid Rain units for which the submission is made. I certify under penalty of law examined, and am familiar with, the statements and information submitted in this distrachments. Based on my inquiry of those individuals with primary responsibility for information, I certify that the statements and information are to the best of my knot true, accurate, and complete. I am aware that there are significant penalties for substatements and information or omitting required statements and information, including fine or imprisonment.

Name Harvely F. Wildschuetz, Utilities Director, Desig

Signature Wey Wildschuetz, Utilities Director, Desig

Date 413/75

DEP Form No. 62-210.900(1)(a) - Form Effective: 7-1-95

Plant Name (from Step 1)

STEP 4 Read the standard requirements and certification, enterthe name of the designated representative, and sign and date

#### Standard Requirements

#### Permit Requirements.

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

#### Monitoring Requirements.

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

#### Sulfur Dioxide Requirements.

(1) The owners and operators of each source and each Acid Rain unit at the source shall: (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the

previous calendar year from the unit; and (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:

(i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or

- (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System eccounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1)(i) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

  (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or the written exemption under 40 CFR 72.7 and 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

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

#### Excess Emissions Requirements.

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

(ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

### Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents (c. a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
  - (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

(ii) All emissions monitoring information, in accordance with 40 CFR part 75;

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

STEP, 5 (optional)
Enter the source AIRS
and FINDS Identification
numbers, If known

FINDS	



## Department of Environmental Protection

Lawton Chiles Governor Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Virginia B. Wetherell Secretary

Mr. Harvey F. Wildschuetz Utilities Director Lake Worth Utilities 1900 2nd Avenue North Lake Worth, FL 33461

#### ORDER EXTENDING PERMIT EXPIRATION DATE

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant, Facility ID No.: 0990045

Section 403.0872(2)(b), Florida Statutes (F.S.), specifies that any facility which submits to the Department of Environmental Protection (Department) a timely and complete application for a Title V permit "is entitled to operate in compliance with its existing air permit pending the conclusion of proceedings associated with its application."

Section 403.0872(6), F.S., provides that a proposed Title V permit which is not objected to by the United States Environmental Protection Agency (EPA) "must become final no later than fifty-five (55) days after the date on which the proposed permit was mailed" to the EPA.

Pursuant to the Federal Acid Rain Program as defined in rule 62-210.200, Florida Administrative Code (F.A.C.), all Acid Rain permitting must become effective on January 1 of a given year.

This facility which will be permitted pursuant to section 403.0872, F.S., (Title V permit) will be required to have a permit effective date subsequent to the final processing date of the facility's Title V permit.

To prevent misunderstanding and to assure that the above identified facility continues to comply with existing permit terms and conditions until its Title V permit becomes effective, it is necessary to extend the expiration date(s) of its existing valid permit(s) until the effective date of its Title V permit. Therefore, under the authority granted to the Department by section 403.061(8), F.S., IT IS ORDERED:

- 1. The expiration date(s) of the existing valid permit(s) under which the above identified facility is currently operating is (are) hereby extended until the effective date of its permit issued pursuant to section 403.0872, F.S., (Title V permit);
- 2. The facility shall comply with all terms and conditions of its existing valid permit(s) until the effective date of its Title V permit;
- 3. The facility will continue to comply with the requirements of Chapter 62-214, F.A.C., and the Federal Acid Rain Program, as defined in rule 62-210.200, F.A.C., pending final issuance of its Title V permit.

#### PETITION FOR ADMINISTRATIVE REVIEW

The Department will take the action described in this Order unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 of the Florida Statutes (F.S.). Mediation under Section 120.573, F.S., will not be available for this proposed action.

A person whose substantial interests are affected by the Department's proposed decision may petition for an administrative hearing in accordance with sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Petitions must be filed within 21 days of receipt of this Order. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 of the Florida Statutes, or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant, Facility ID No.: 0990045 Page 2 of 3

approval of the presiding officer upon the filing of a motion in compliance with rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department File Number, and the county in which the project is proposed;
  - (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action:
  - (d) A statement of the material facts disputed by the petitioner, if any;
- (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the action or proposed action addressed in this notice of intent.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this Order. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under section 120.542 of the Florida Statutes. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. The petition must specify the following information:

- (a) The name, address, and telephone number of the petitioner;
- (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;
- (c) Each rule or portion of a rule from which a variance or waiver is requested;
- (d) The citation to the statute underlying (implemented by) the rule identified in (c) above;
- (e) The type of action requested;
- (f) The specific facts that would justify a variance or waiver for the petitioner;
- (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and
- (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in section 120.542(2) of the Florida Statutes, and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This Order constitutes final agency action unless a petition is filed in accordance with the above paragraphs.

#### RIGHT TO APPEAL

Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 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

Tom G. Smith Power Plant and Lake Worth Water Treatment Plant, Facility ID No.: 0990045 Page 3 of 3

Appeal. The Notice of Appeal must be filed within 30 days from the date the Notice of Agency Action is filed with the Clerk of the Department.

DONE AND ORDERED this 3/ day of Oct, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

HOWARD L/RHODES, Director

Division of Air Resources Management

Twin Towers Office Building

Mail Station 5500

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

850/488-0114

#### **CERTIFICATE OF SERVICE**

Mr. Harvey F. Wildschuetz, LWU

Clerk Stamp

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

(Clerk)

(Clerk)

Copy By Regular Mail To:

Ms. Margaret Johnstone, LWU

Mr. Isidore Goldman, P.E., DEP SED

Mr. James Stormer, PBCHD

Date: From:

12/31/97 5:01:59 PM Mary Fillingim TAL

Subject: To:

New Posting See Below

There is a new posting available on the Florida website.

0990045002AV T G SMITH PLANT

Final

If you have any questions, please let me know.

Thanks, Mary

To: To:

pierce carla Barbara Boutwell TAL To: Scott Sheplak TAL To: To: Terry Knowles

adams yolanda

To: danois gracy

Elizabeth Walker TAL To: CC: Susan DeVore TAL

# Florida Department of Environmental Protection

TO:

Howard L. Rhodes

FROM:

Clair H. Fancy

DATE:

December 22, 1997

SUBJECT:

FINAL Permit No.: 0990045-002-AV

City of Lake Worth

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

This permit is for the initial Title V air operation permit for the subject facility which is a municipal power plant with five diesel generators, one boiler regulated under 62-296.406 (unit S-1), two boilers regulated under 62-296.405 (units S-3 and S-4), one simple cycle gas turbine, one combined cycle gas turbine, and fuel oil storage tanks subject to NSPS Subpart Kb. Unregulated emissions units are fuel oil and lube oil storage tanks not subject to the NSPS. The two large boilers and combined cycle unit are also regulated under Power Plant Siting Certification No. PA 74-05. This facility is subject to NOx RACT. We could not find a BACT determination for unit S-1. BACT for this unit was assumed to be natural gas or 2.25% sulfur fuel oil, the same sulfur limit as required by Power Plant Siting Certification for units S-3 and S-4, and consistent with BACT determinations of that era. Fossil fuel steam generators, units S-3 and S-4 are the Acid Rain units at the facility.

Additional information was requested. A response was received on July 31, 1997. This application was complete on date the response was received, July 31, 1997. Written comments were received from the Palm Beach County Health Department.

This facility reported that each emissions unit was in compliance at the time of the application.

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

We received 27 comments from City of Lake Worth on the DRAFT permit, mostly related to clarification of the permit conditions. All comments were resolved.

We received no comments from Region 4, U.S. EPA. I recommend your signature.

Attachment (permit)

CHF/sd