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STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF FINAL PERMIT

In the Matter of an Application for Permit by:

Mr. Ronald W. Tomlin
Assistant Managing Director
Lakeland Electric & Water Utilities
501 East Lemon Street
Lakeland, Florida 33801-5079

FINAL Permit No.: 1050004-003-AV C. D. McIntosh, Jr. Power Plant

Enclosed is FINAL Permit Number 1050004-003-AV for the operation of the C. D. McIntosh, Jr. Power Plant located at 3030 East Lake Parker Drive, Lakeland, Polk 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

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 4 15 98 to the person(s) listed or as otherwise noted:

- Mr. Ronald W. Tomlin*, Lakeland Electric & Water Utilities
- Ms. Farzie Shelton, Lakeland Electric & Water Utilities
- Mr. Kennerd Kosky, PE, Golder Associates, Inc.
- Mr. Bill Thomas, PE, FDEP SWD
- 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.

Clerk)

Date)

FINAL PERMIT DETERMINATION

FINAL Permit No.: 1050004-003-AV

Page 1 of 1

I. Comment(s).

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

II. Emissions Units I. D. Nos. for Unregulated Emissions Units.

The PROPOSED permit had each of the unregulated emissions units assigned the I. D. number -xxx. The unregulated emissions units were entered into the data base and emissions units I. D. Numbers of -007 through -027 were assigned. The appropriate I. D. number was associated with each unit wherever the appeared in the permit or appendices.

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.

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant Facility ID No.: 1050004 Polk County

Initial Title V Air Operation Permit **FINAL Permit No.:** 1050004-003-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

Compliance Authority:

Department of Environmental Protection Southwest District Office 3804 Coconut Palm Drive Tampa, Florida 33619-8218 Telephone: 813/744-6100

Fax: 813/744-6084

Initial Title V Air Operation Permit **FINAL Permit No.:** 1050004-003-AV

Table of Contents

Section			Page Number
Placard Page			1
I. Facility Information			2 - 4
A. Facility Descripti	on.		
B. Summary of Emi	ssions	Unit ID Nos. and Brief Descriptions.	
C. Relevant Docume	ents.		
II. Facility-wide Conditions			5 - 6
III. Emissions Units and Co	nditio	ons	
A. Emissions Unit	-001	McIntosh Unit 1	7 - 17
B. Emissions Units	-002	Diesel Engine Peaking Unit 2	18 - 22
	-003	Diesel Engine Peaking Unit 3	
C. Emissions Unit	-004	Gas Turbine Peaking Unit 1	23 - 28
D. Emissions Unit	-005	McIntosh Unit 2	
E. Emissions Unit	-006	McIntosh Unit 3	43 - 61
IV. Acid Rain Part			
A. Acid Rain, Phase	II		62 - 63



Department of Environmental Protection

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

Virginia B. Wetherell Secretary

Permittee:

Lakeland Electric & Water Utilities 501 East Lemon Street Lakeland, Florida 33801-5079

FINAL Permit No.: 1050004-003-AV

Facility ID No.: 1050004

SIC Nos.: 49, 4911

Project: Initial Title V Air Operation Permit

This permit is for the operation of the C. D. McIntosh, Jr. Power Plant. This facility is located at 3030 East Lake Parker Drive, Lakeland, Polk County; UTM Coordinates: Zone 17, 409.0 km East and 3106.2 km North: Latitude: 28° 04' 50" North and Longitude: 81° 55' 32" 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)
FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE REPORT (40 CFR 60; July 1996)
Phase II Acid Rain Application/Compliance Plan received 12/18/95
Alternate Sampling Procedure: ASP Number 97-B-01
APPENDIX 40 CFR 60, SUBPART A (40 CFR 60; July 1996)
ORDER EXTENDING PERMIT EXPIRATION DATE dated 02/09/98

Effective Date: January 1, 1999

Renewal Application Due Date: July 5, 2003

Expiration Date: December 31, 2003

Howard L. Rhodes, Director Division of Air Resources

Management

HLR/sms/es

FINAL Permit No.: 1050004-003-AV

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of three fossil fuel fired steam generators, two diesel powered generators, and one gas turbine. Fossil fuel fired steam generators 1 and 2 are fired with No. 6 fuel oil and natural gas with distillate oil used as an ignitor. Fossil fuel fired steam generator 3 is primarily fired with coal, refuse derived fuel and petroleum coke.

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

Based on the initial Title V permit application received June 14, 1996, this facility is a major source of hazardous air pollutants (HAPs).

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

<u>E.U.</u>	
ID No.	Brief Description
-001	McIntosh Unit 1 - Fossil Fuel Fired Steam Generator
-002	Diesel Engine Peaking Unit 2
-003	Diesel Engine Peaking Unit 3
-004	Gas Turbine Peaking Unit 1
-005	McIntosh Unit 2 - Fossil Fuel Fired Steam Generator
-006	McIntosh Unit 3 - Fossil Fuel Fired Steam Generator

FINAL Permit No.: 1050004-003-AV

Unregulated Emissions Units and/or Activities

E.U.

ID No.	Brief Description of Emissions Units and/or Activity
-007	Tanks with greater than 10,000 gallon capacity installed prior to July 23, 1984
-008	Diesel drive coal tunnel sump engine
-009	Fire water UPS diesel No. 31
-010	Fire water UPS diesel No. 32
-011	CT startup diesel
-012	General purpose diesel engines
-013	Emergency generators
-014	General purpose painting
-015	Parts Cleaning
-016	Sand Blasting (Maintenance only)
-017	Wastewater Treatment Tank
-018	Three Cooling Towers (Unit 2 and 3)
-019	Northside Waste Water Treatment Facility - Wastewater treatment processes and
	tanks
-020	Northside Waste Water Treatment Facility - Two emergency diesel generators
-021	Northside Waste Water Treatment Facility - Chemical and petroleum storage
-022	Northside Waste Water Treatment Facility - Miscellaneous activities
-023	Coal processing and conveying system
-024	Coal storage system
-025	Coal transfer and loading system
-026	Limestone handling and storage system
-027	Flyash handling and storage system

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

FINAL Permit No.: 1050004-003-AV

Subsection C. Relevant Documents.

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

These documents are provided to the permittee for information purposes only:

Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History / ID Number Changes

These documents are on file with permitting authority:

Initial Title V Permit Application received June, 14, 1996 Additional Information Request dated January 13, 1997 Additional Information Response received February 10, 1997 Additional Information received May 9, 1997 Letter received July 2, 1997 from Ms. Farzie Shelton Additional Information received July 8, 1997 Letter received August 7, 1997 from Ms. Farzie Shelton Letter received September 4, 1997 from Ms. Farzie Shelton

FINAL Permit No.: 1050004-003-AV

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>Unregulated Emissions Units and/or Activities.</u> Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit. [Rule 62-213.440(1), F.A.C.]
- 6. <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.]
- 7. 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. Containers shall be kept closed.

[Rule 62-296.320(1)(a), F.A.C.; Proposed by applicant in the initial Title V permit application received June 14, 1996; Revised by a letter received August 7, 1997]

FINAL Permit No.: 1050004-003-AV

8. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: maintenance of paved areas; regular mowing of grass and care of vegetation; and limiting access to plant property by unnecessary vehicles.

[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application received June 14, 1996, as amended in a request received July 8, 1997]

- 9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one. [Rule 62-213.440, F.A.C.]
- 10. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Southwest District office:

Department of Environmental Protection Southwest District Office 3804 Coconut Palm Drive Tampa, Florida 33619-8218 Telephone: 813/744-6100 Fax: 813/744-6084

11. 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, Georgia 30303
Telephone: 404/562-9099

Fax: 404/562-9095

FINAL Permit No.: 1050004-003-AV

III. Emissions Section Unit.

Subsection A. This section addresses the following emissions unit(s).

E.U.

ID No. Brief Description

-001 McIntosh Unit 1 - Fossil Fuel Fired Steam Generator

McIntosh Unit 1 is a forced draft boiler rated at a nominal load of 90 megawatts. The unit is fired with natural gas at a maximum heat input rate of 985 million Btu per hour (approximately 970 million cubic feet per hour), or No. 6 fuel oil, having a maximum sulfur content of 2.5 percent by weight, at a maximum heat input rate of 950 million Btu per hour (approximately 6,300 gallons per hour). This unit is also permitted to burn "on-specification" used oil generated by the City of Lakeland, at a maximum heat input rate of 950 million Btu per hour. McIntosh Unit 1 began commercial service in February, 1971.

{Permitting note(s): The emissions unit is regulated under Acid Rain, Phase II; and Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input.}

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

Essential Potential to Emit (PTE) Parameters

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

<u>Unit No.</u>	MMBtu/hr Heat Input	<u>Fuel Type</u>
1	985	Natural Gas
	950	No. 6 Fuel Oil
	950	Used Oil

When a blend of fuel oil, "on-specification" used oil or natural gas is fired, the heat input is prorated based on the percent heat input of each fuel. The Acid Rain CEM will not be a method of compliance for the determination of the heat input rate.

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

- **A.2.** Emissions Unit Operating Rate Limitation After Testing. See specific condition **A.23**. [Rule 62-297.310(2), F.A.C.]
- **A.3.** Methods of Operation. Fuels. The only fuels allowed to be burned are natural gas, propane, No. 6 Fuel Oil, On-Specification Used Oil, No. 2 Fuel Oil and combinations of natural gas, propane, No. 6 Fuel Oil, No. 2 Fuel Oil and/or On-Specification Used Oil. On-Specification used oil containing any quantifiable levels of PCBs can only be fired when the emissions unit is at normal operating temperatures.

[Rule 62-213.410, F.A.C.; and, 40 CFR 271.20(e)(3)]

FINAL Permit No.: 1050004-003-AV

A.4. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached 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.}

- A.5. <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 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.]
- **A.6.** <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.]

- A.7. <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.]
- A.8. <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.]
- **A.9.** Sulfur Dioxide. When burning liquid fuel, sulfur dioxide emissions shall not exceed 2.75 pounds per million Btu heat input, as measured by applicable compliance methods. [Rule 62-296.405(1) (c)1.j., F.A.C.]
- **A.10.** Sulfur Dioxide Sulfur Content. The No. 6 fuel oil sulfur content shall not exceed 2.5 percent, by weight. See specific condition **A.21**. [Rule 62-296.405(1)(e)3., F.A.C.; and, AO 53-243945]

FINAL Permit No.: 1050004-003-AV

A.11. "On-Specification" Used Oil. Only "on-specification" used oil generated by the City of Lakeland shall be fired in this unit. The quantity fired in this unit shall not exceed 1,000 barrels (42,000 gallons) per calendar year. "On-specification" used oil is defined as used oil that meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered "off-specification" oil and shall not be fired.

CONSTITUENT / PROPERTY-* ALLOWABLE LEVEL Arsenic 5 ppm maximum Cadmium 2 ppm maximum 10 ppm maximum Chromium 100 ppm maximum Lead 1000 ppm maximum Total Halogens 100 °F minimum Flash Point **PCBs** less than 50 ppm

Excess Emissions

A.12. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.]

A.13. 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.

[Rule 62-210.700(2), F.A.C.]

A.14. 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.]

^{*} As determined by ASTM Standard D140-70, or equivalent [40 CFR 279.11; and, AO 53-243945]

Monitoring of Operations

A.15. Sulfur Dioxide. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. See specific conditions A.10., A.20. and A.21. [Rule 62-296.405(1)(f)1.b., F.A.C.]

FINAL Permit No.: 1050004-003-AV

A.16. 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. [Rule 62-297.310(5), 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.}

A.17. <u>Visible emissions</u>. The test method for visible emissions 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 **A.18**. [Rule 62-296.405(1)(e)1., F.A.C.]

FINAL Permit No.: 1050004-003-AV

A.18. <u>DEP Method 9</u>. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

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

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

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

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

A.20. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards. The permittee may use the EPA test

methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the

FINAL Permit No.: 1050004-003-AV

[Rules 62-213.440, 62-296.405(1)(e)3. and 62-297.401, F.A.C.; and, AO 53-243945]

permittee upon each fuel delivery. See specific conditions A.10. and A.21.

A.21. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or the respective successor ASTM method(s).

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.]

A.22. 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.]

FINAL Permit No.: 1050004-003-AV

- **A.23.** Operating Rate During Testing. Testing of emissions shall be conducted with the 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.]
- **A.24.** 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.]

A.25. Applicable Test Procedures.

(a) Required Sampling Time.

- 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
- 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) <u>Required Flow Rate Range</u>. 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, attached as part of this permit.
- (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.]

FINAL Permit No.: 1050004-003-AV

A.26. 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.

[Rule 62-297.310(6), F.A.C.]

A.27. 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 for more than 400 hours other than during startup.
- 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
- 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
- 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 fuel, other than during startup, for a total of more than 400 hours.
- 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.

FINAL Permit No.: 1050004-003-AV

- (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) <u>Waiver of Compliance Test Requirements</u>. 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.; and, SIP approved]

- **A.28.** By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

- **A.29.** 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.]

- A.30. Compliance with the "on-specification" used oil requirements will be determined as follows:
- (a) Analysis of a sample collected from each batch delivered for firing; or,
- (b) The new batch delivery is from a collection site that has an acceptable analysis already on file with the facility and the analytical results are assumed by the facility for the batch.

For quantification purposes, the highest concentration of each constituent as determined by any analysis is assumed to be the concentration of the constituent of the blended used oil. See specific condition **A.11**.

[AO 53-243945]

FINAL Permit No.: 1050004-003-AV

Record keeping and Reporting Requirements

A.31. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program 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 Department or the appropriate Local Program. [Rule 62-210.700(6), F.A.C.]

A.32. Submit to the Department 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.]

A.33. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.

FINAL Permit No.: 1050004-003-AV

- 8. The date, starting time and duration of each sampling run.
- 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- 10. The number of points sampled and configuration and location of the sampling plane.
- 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- 12. The type, manufacturer and configuration of the sampling equipment used.
- 13. Data related to the required calibration of the test equipment.
- 14. Data on the identification, processing and weights of all filters used.
- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

- **A.34.** Records shall be kept of each delivery of "on-specification" used oil with a statement of the origin of the used oil and the quantity delivered/stored for firing. In addition, monthly records shall be kept of the quantity of "on-specification" used oil fired in this unit. The above records shall be maintained in a form suitable for inspection, retained for a minimum of five years, and be made available upon request. [Rule 62-213.440(1)(b)2.b., F.A.C.; and, AO 53-243945]
- **A.35.** The permittee shall include in the "Annual Operating Report for Air Pollutant Emitting Facility" a summary of the "on-specification" used oil analyses for the calendar year and a statement of the total quantity of "on-specification" used oil fired in Unit 1 during the calendar year.

 [AO 53-243945]

FINAL Permit No.: 1050004-003-AV

Section III. Emissions Unit(s) and Conditions.

Subsection B. This section addresses the following emissions unit(s).

E.U.

ID No. -002 Diesel Engine Peaking Unit 2 -003 Diesel Engine Peaking Unit 3

Diesel Engine Peaking Units 2 and 3 are diesel fired internal combustion engines which each drives a generator capable of producing electric power at a maximum rating of 2.5 megawatts. These units are each fired on No. 2 fuel oil, with a maximum sulfur content of 0.5 percent by weight, at a maximum firing rate of 201.6 gallons per hour. This corresponds to a maximum heat input of 28 million Btu per hour. Diesel Engine Peaking Units 2 and 3 began commercial service in 1970.

{Permitting note(s): The emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. Each diesel engine peaking unit has its own stack.}

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

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity.

- a. The maximum heat input rate of each diesel engine peaking unit is 28 million Btu per hour [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]
- b. **Not Federally Enforceable** The maximum firing rate of each diesel engine peaking unit is 201.6 gallons per hour firing No. 2 fuel oil. [AO 53-244726]
- **B.2.** Emissions Unit Operating Rate Limitation After Testing. See specific condition **B.13**. [Rule 62-297.310(2), F.A.C.]
- **B.3.** Methods of Operation Fuels. Only distillate (No. 2) fuel oil shall be fired in the diesel engine peaking units. [Rule 62-213.410, F.A.C.]
- **B.4.** Hours of Operation. These emissions units may operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AO 53-244726]

Emission Limitations and Standards

{Permitting Note: The attached 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.}

FINAL Permit No.: 1050004-003-AV

B.5. <u>Visible Emissions</u>. Visible emissions from each diesel engine peaking unit shall not be equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1., F.A.C.; and, AO 53-244726]

B.6. Not federally enforceable. <u>Sulfur Dioxide - Sulfur Content</u>. The sulfur content of the No. 2 fuel oil shall not exceed 0.5 percent, by weight. [AO 53-244726]

Excess Emissions

- **B. 7.** Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.]
- **B. 8.** 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

B.9. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor or the permittee upon each fuel delivery. See specific condition **B.12**. [Rule 62-213.440, F.A.C.]

B.10. Determination of Process Variables.

(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

FINAL Permit No.: 1050004-003-AV

(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. [Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

{Permitting note: 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.}

- **B.11.** The test method for visible emissions 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.]
- **B.12.** The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or the respective successor ASTM method(s).

[Rules 62-213.440 and 62-297.440, F.A.C.; and, AO 53-244726]

B.13. Operating Rate During Testing. Testing of emissions shall be conducted with the 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.]

FINAL Permit No.: 1050004-003-AV

B.14. Applicable Test Procedures.

(a) Required Sampling Time.

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

[Rule 62-297.310(4)(a)2.c., F.A.C.]

- **B.15.** 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.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - 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.
 - 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.

FINAL Permit No.: 1050004-003-AV

- (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.; SIP approved; and, AO 53-244726]

- **B.16.** By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

Recordkeeping and Reporting Requirements

B.17. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department 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 Department.

[Rule 62-210.700(6), F.A.C.]

B.18. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. [Rule 62-297.310(8), F.A.C.]

FINAL Permit No.: 1050004-003-AV

Section III. Emissions Unit(s) and Conditions.

Subsection C. This section addresses the following emissions unit(s).

E.U.

ID No. Brief Description

-004 Gas Turbine Peaking Unit 1

Gas Turbine Peaking Unit 1 consists of a gas turbine which drives a generator producing electrical power at a nominal nameplate rating of 20 megawatts. The gas turbine is fired with natural gas, or No. 2 fuel oil with a maximum sulfur content of 0.5 percent by weight. The maximum fuel firing rate is 320 million cubic feet per hour of natural gas (approximately 330 million Btu per hour) or 2,310 gallons per hour of No. 2 fuel oil (approximately 320 million Btu per hour). Gas Turbine Peaking Unit 1 began commercial service in 1973.

{Permitting notes: This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required. This unit is not subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines.}

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

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity.

a. The maximum heat input rate of the turbine is 330 million Btu per hour (lower heating value) at 30 degrees F while firing natural gas and 320 million Btu per hour (lower heating value) at 30 degrees F while firing No. 2 fuel oil.

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

- b. **Not Federally Enforceable** The maximum firing rate of the turbine is 320 million cubic feet per hour when firing natural gas or 2,310 gallons per hour when firing No. 2 fuel oil. [AO 53-244727]
- C.2. <u>Emissions Unit Operating Rate Limitation After Testing</u>. See specific condition C.13. [Rule 62-297.310(2), F.A.C.]
- **C.3.** Methods of Operation Fuels. Only natural gas or distillate (No. 2) fuel oil shall be fired in the combustion turbine.

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

C.4. Hours of Operation. These emissions unit(s) may operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AO 53-244727]

FINAL Permit No.: 1050004-003-AV

Emission Limitations and Standards

{Permitting Note: The attached 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.}

C.5. <u>Visible Emissions</u>. Visible emissions from each turbine shall not be equal to or greater than 20 percent opacity.

[Rule 62-296.320(4)(b)1., F.A.C.; and, AO 53-244727]

C.6. Not federally enforceable. Sulfur Dioxide - Sulfur Content. The sulfur content of the No. 2 fuel oil shall not exceed 0.5 percent, by weight.

[AO 53-244727]

Excess Emissions

- C.7. Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.]
- **C.8.** 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

C.9. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor or the permittee upon each fuel delivery. See specific condition **C.12**. [Rule 62-213.440, F.A.C.]

C.10. Determination of Process Variables.

(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

FINAL Permit No.: 1050004-003-AV

(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. [Rule 62-297.310(5), 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.}

- C.11. The test method for visible emissions 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.]
- C.12. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or the respective successor ASTM method(s).

[Rules 62-213.440 and 62-297.440, F.A.C.; and, AO 53-244727]

C.13. Not federally enforceable. Operating Rate During Testing.

Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 95-100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then sources may be tested at less than capacity. In such cases, the entire heat input vs. inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 105 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report.

[Requested in initial Title V permit application response for additional information dated February 10, 1997];

FINAL Permit No.: 1050004-003-AV

C.14. Applicable Test Procedures.

(a) Required Sampling Time.

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

[Rule 62-297.310(4)(a)2.c., F.A.C.]

- **C.15.** <u>Frequency of Compliance Tests</u>. 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.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - 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.

- FINAL Permit No.: 1050004-003-AV
- (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.; SIP approved; and, AO 53-244727]

- **C.16.** <u>Visible Emissions Testing Annual</u>. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
- a. only gaseous fuels; or
- b. gaseous fuels in combination with any amount of liquid fuels for less than 400 hours per year; or
- c. only liquid fuels for less than 400 hours per year.

[Rules 62-297.310(7)(a)4. & 8., F.A.C.]

Recordkeeping and Reporting Requirements

C.17. <u>Malfunction Reporting</u>. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department 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 Department. [Rule 62-210.700(6), F.A.C.]

FINAL Permit No.: 1050004-003-AV

C.18. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. [Rule 62-297.310(8), F.A.C.]

FINAL Permit No.: 1050004-003-AV

Section III. Emissions Unit(s) and Conditions.

Subsection D. This section addresses the following emissions unit(s).

E.U.

ID No. Brief Description

-005 McIntosh Unit 2 - Fossil Fuel Fired Steam Generator

McIntosh Unit 2 is a nominal 114.7 megawatt (electric) fossil fuel fired steam generator. The unit is fired on low sulfur No. 6 or No. 2 fuel oil with a maximum heat input of 1,115 million Btu per hour, or natural gas with a maximum heat input of 1,184.5 million Btu per hour. McIntosh Unit 2 began commercial service in June, 1976.

{Permitting note(s): The emissions unit is regulated under Acid Rain, Phase II; and NSPS - 40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel Fired Steam Generators for Which Construction is Commenced After August 17, 1971, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.}

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

Essential Potential to Emit (PTE) Parameters

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

Unit No.	MMBtu/hr Heat Input	Fuel Type
2	1,184.5	Natural Gas
	1,115	No. 6 Fuel Oil
	1,115	No. 2 Fuel Oil

When a blend of fuel oil and natural gas is fired, the heat input is prorated based on the percent heat input of each fuel. The Acid Rain CEM will not be a method of compliance for the determination of the heat input rate.

[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 **D.23**. [Rule 62-297.310(2), F.A.C.]
- **D.3.** Methods of Operation. Fuels. The only fuels allowed to be burned are natural gas, propane, No. 6 Fuel Oil, No. 2 Fuel Oil and combinations of natural gas, propane, No. 6 Fuel Oil and/or No. 2 Fuel Oil. [Rule 62-213.410, F.A.C.]

FINAL Permit No.: 1050004-003-AV

D.4. Hours of Operation. This emissions unit is allowed to 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.}

Particulate Matter

- **D.5.** On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which:
- (1) Contain particulate matter in excess of 43 nanograms per joule heat input (0.10 lb per million Btu) derived from fossil fuel or fossil fuel and wood residue.
- (2) Exhibit greater than 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity.

[40 CFR 60.42(a)(1) & (2)]

Sulfur Dioxide

- **D.6.** On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of:
- (1) 340 nanograms per joule heat input (0.80 lb per million Btu) derived from liquid fossil fuel. [40 CFR 60.43(a)(1)]
- **D.7.** Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels.

[40 CFR 60.43(c)]

Nitrogen Oxides

D.8. On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO₂ in excess of:

FINAL Permit No.: 1050004-003-AV

- (1) 86 nanograms per joule heat input (0.20 lb per million Btu) derived from gaseous fossil fuel.
- (2) 129 nanograms per joule heat input (0.30 lb per million Btu) derived from liquid fossil fuel. [40 CFR 60.44(a)(1) & (2)]
- **D.9.** When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) is determined by proration using the following formula:

$$PS_{NOx} = \underline{w(260) + x(86) + y(130) + z(300)}$$
$$\underline{w + x + y + z}$$

where:

 PS_{NOx} = is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired;

w = is the percentage of total heat input derived from lignite;

x = is the percentage of total heat input derived from gaseous fossil fuel;

y = is the percentage of total heat input derived from liquid fossil fuel; and,

z = is the percentage of total heat input derived from solid fossil fuel (except lignite).

[40 CFR 60.44(b)]

Excess Emissions

- **D.10.** Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:
- (1) Opacity. Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.

[40 CFR 60.45(b)(2) and 60.45(g)(1)]

D.11. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.

FINAL Permit No.: 1050004-003-AV

[Rule 62-210.700(1), F.A.C.]

D.12. 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

D.13. 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. [Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

{Permitting note: 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.}

D.14. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of 40 CFR 60 or other methods and procedures as specified in 40 CFR 60.46, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.46(d). [40 CFR 60.46(a)]

FINAL Permit No.: 1050004-003-AV

- **D.15.** The owner or operator shall determine compliance with the particulate matter, and NO_X standards in 40 CFR 60.42, 60.43, and 60.44 as follows:
- (1) The emission rate (E) of particulate matter, or NO_X shall be computed for each run using the following equation:

 $E = C F_d (20.9)/(20.9 - \% O_2)$

E = emission rate of pollutant, ng/J (1b/million Btu).

C = concentration of pollutant, ng/dscm (1b/dscf).

% O_2 = oxygen concentration, percent dry basis.

 F_d = factor as determined from Method 19.

- (2) Method 5 shall be used to determine the particular matter concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems.
 - (i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train may be set to provide a gas temperature no greater than 160 ± 14 °C (320 \pm 25 °F).
 - (ii) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (% O_2). The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab sampling procedure is used, the O_2 concentration for the run shall be the arithmetic mean of all the individual O_2 sample concentrations at each traverse point.
 - (iii) If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 traverse points.
- (3) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.
- (5) Method 7 shall be used to determine the NO_X concentration.
 - (i) The sampling site and location shall be the same as for the SO₂ sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.
 - (ii) For each NO_X sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (% O_2). The sample shall be taken simultaneously with, and at the same point as, the NO_X sample.
- (iii) The NO_X emission rate shall be computed for each pair of NO_X and O₂ samples. The NO_X emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples. [40 CFR 60.46(b)(1), (2), (3), & (5)]
- **D.16.** Compliance with the sulfur dioxide emission standard of specific condition **D.7.** shall be demonstrated using the fuel sampling and analysis procedures of specific condition **D.17.** [Rule 62-213.440, F.A.C. and Applicant Request dated June 14, 1996]

FINAL Permit No.: 1050004-003-AV

- **D.17.** The following fuel sampling and analysis program shall be used to demonstrate compliance with the sulfur dioxide standard and as the substitute for the sulfur dioxide continuous monitoring system:
 - a. Determine and record the as-fired fuel sulfur content, percent by weight, (1) for liquid fuels using either ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or the respective successor ASTM method(s), to analyze a representative sample of the blended fuel following each fuel delivery, (2) for gaseous fuels using ASTM D1072-90, or the respective successor ASTM method.
 - b. Record daily the amount of each fuel fired, the density of each fuel, and the percent sulfur content by weight of each fuel.
 - c. Utilize the information in a. and b., above, to calculate the SO_2 emission rate to ensure compliance at all times.

[Rules 62-213.440, F.A.C.]

- **D.18.** When combinations of fossil fuels are fired, the owner or operator (in order to compute the prorated standard as shown in 40 CFR 60.44(b)) shall determine the percentage (w, x, y, or z) of the total heat input derived from each type of fuel as follows:
- (1) The heat input rate of each fuel shall be determined by multiplying the gross calorific value of each fuel fired by the rate of each fuel burned.
- (2) ASTM Methods D 240-76 (liquid fuels), or D 1826-77 (gaseous fuels) (incorporated by reference-see 40 CFR 60.17) shall be used to determine the gross calorific values of the fuels.
- (3) Suitable methods shall be used to determine the rate of each fuel burned during each test period, and a material balance over the steam generating system shall be used to confirm the rate.

 [40 CFR 60.46(c)(1), (2), & (3)]
- **D.19.** The owner or operator may use the following as alternatives to the reference methods and procedures in 40 CFR 60.46 or in other sections as specified:
- (1) The emission rate (E) of particulate matter, SO_2 and NO_X may be determined by using the Fc factor, provided that the following procedure is used:
 - (i) The emission rate (E) shall be computed using the following equation:

$$E = C F_c (100 / \% CO_2)$$

where:

E = emission rate of pollutant, ng/J (lb/million Btu).

C = concentration of pollutant, ng/dscm (lb/dscf).

% CO_2 = carbon dioxide concentration, percent dry basis.

 F_c = factor as determined in appropriate sections of Method 19.

FINAL Permit No.: 1050004-003-AV

- (ii) If and only if the average F_c factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O_2 and CO_2 concentration according to the procedures in 40 CFR 60.46(b)(2)(ii), (4)(ii), or (5)(ii). Then if F_o (average of three runs), as calculated from the equation in Method 3B, is more than \pm 3 percent than the average F_o value, as determined from the average values of F_d and F_c in Method 19, i.e., F_{oa} =0.209 (F_{da} / F_{ca}), then the following procedure shall be followed:
 - (A) When F_o is less than 0.97 F_{oa} , then E shall be increased by that proportion under 0.97 F_{oa} , e.g., if F_o is 0.95 F_{oa} , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.
 - (B) When F_0 is less than 0.97 F_{0a} and when the average difference (\overline{d}) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{0a} , e.g., if F_0 is 0.95 F_{0a} , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
 - (C) When F_o is greater than 1.03 F_{oa} and when \overline{d} is positive, then E shall be decreased by that proportion over 1.03 F_{oa} , e.g., if F_o is 1.05 F_{oa} , E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
- (2) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack gas temperature at the sampling location does not exceed an average temperature of 160 °C (320 ° F). Method 17 shall not be used after wet FGD systems if the effluent gas is saturated or laden with water
- (3) Particulate matter and SO₂ may be determined simultaneously with the Method 5 train provided that the following changes are made:
 - (i) The filter and impinger apparatus in sections 2.1.5 and 2.1.6 of Method 8 is used in place of the condenser (section 2.1.7) of Method 5.
 - (ii) All applicable procedures in Method 8 for the determination of SO₂ (including moisture) are used.
- (5) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the O₂ concentration (%O₂) for the emission rate correction factor.
- (6) For Method 3, Method 3A or 3B may be used.
- (7) For Method 3B, Method 3A may be used.
- [40 CFR 60.46(d)(1), (2), (3), (5), (6), & (7)]

D.20. 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

FINAL Permit No.: 1050004-003-AV

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

standards.

- **D.21.** Operating Rate During Testing. Testing of emissions shall be conducted with the 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.]
- **D.22.** 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 three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

D.23. 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.

FINAL Permit No.: 1050004-003-AV

- 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) <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, attached as part of this permit.
- (e) <u>Allowed Modification to EPA Method 5</u>. 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.]
- **D.24.** 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.

[Rule 62-297.310(6), F.A.C.]

FINAL Permit No.: 1050004-003-AV

D.25. <u>Frequency of Compliance Tests</u>. 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.

- 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 and/or solid fuel for a total of no more than 400 hours.
- 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
- 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.
- 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) <u>Waiver of Compliance Test Requirements</u>. 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.,

FINAL Permit No.: 1050004-003-AV

[Rule 62-297.310(7), F.A.C.; and, SIP approved]

- **D.26.** 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

shall apply.

- 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 62-297.310(7)(a)4., F.A.C.]

- **D.27.** 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.]

Continuous Monitoring Requirements

- **D.28.** The owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions.

 [40 CFR 60.45(a)]
- **D.29.** Sulfur Dioxide. For a fossil fuel fired steam generator that does not use a flue gas desulfurization device, a continuous monitoring system for measuring sulfur dioxide emissions is not required if the owner or operator monitors sulfur dioxide emissions by fuel sampling and analysis under 40 CFR 60.45(d). The applicant has elected to utilize fuel sampling and analysis in lieu of a continuous monitoring system for sulfur dioxide. See specific condition **D.19.**

[40 CFR 60.45(b)(2)]

FINAL Permit No.: 1050004-003-AV

- **D.30.** For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:
- (3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent.

 [40 CFR 60.45(c)(3)]

Recordkeeping and Reporting Requirements

- **D.31.** Excess emission and monitoring system performance reports shall be submitted to the Administrator for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c). [40 CFR 60.45(g)]
- **D.32.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department 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 Department. Rule 62-210.700(6), F.A.C.]
- **D.33.** Submit to the Department a written report of emissions in excess of emission limiting standards 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. [Rule 62-213.440, F.A.C.]

D.34. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.

FINAL Permit No.: 1050004-003-AV

- 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
- 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
- 8. The date, starting time and duration of each sampling run.
- 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- 10. The number of points sampled and configuration and location of the sampling plane.
- 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- 12. The type, manufacturer and configuration of the sampling equipment used.
- 13. Data related to the required calibration of the test equipment.
- 14. Data on the identification, processing and weights of all filters used.
- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

FINAL Permit No.: 1050004-003-AV

Miscellaneous Requirements.

D.35. The permittee shall comply with the requirements contained in Appendix 40 CFR 60, Subpart A, attached to this permit.

[Rule 62-204.800(7)(d), F.A.C.]

FINAL Permit No.: 1050004-003-AV

Section III. Emissions Unit(s) and Conditions.

Subsection E. This section addresses the following emissions unit(s).

E.U.

ID No. Brief Description

-006 McIntosh Unit 3 - Fossil Fuel Fired Steam Generator

McIntosh Unit 3 is a nominal 364 megawatt (electric) fossil fuel fired steam generator. The unit is fired on coal, residual oil, natural gas and co-fires refuse derived fuel (RDF) and petroleum coke. The maximum heat input rate is 3,640 million Btu per hour. Unit 3 is equipped with an electrostatic precipitator (ESP), a flue gas desulfurization system (FGD), and low-NO_x burners to control emissions. McIntosh Unit 3 began commercial service in September, 1982.

{Permitting note(s): The emissions unit is regulated under Acid Rain, Phase II; and NSPS - 40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel Fired Steam Generators for Which Construction is Commenced After August 17, 1971, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 212.400(6), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination }

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

Essential Potential to Emit (PTE) Parameters

E.1. Capacity. The maximum heat input rate is 3,640 MMBtu per hour. The Acid Rain CEM will not be a method of compliance for the determination of the heat input rate. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

E.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **E.21.** [Rule 62-297.310(2), F.A.C.]

FINAL Permit No.: 1050004-003-AV

E.3. Methods of Operation - Fuels. The only fuels allowed to be burned are:

Coal only

Low sulfur fuel oil only (≤ 0.5 percent sulfur by weight)

Coal and up to 10 percent refuse (based on heat input)

Low sulfur fuel oil and up to 10 percent refuse (based on heat input)

Coal and up to 20 percent petroleum coke (based on weight)

Coal and up to 20 percent petroleum coke (based on weight) and 10 percent refuse

(based on heat input)

High sulfur fuel oil (> 0.5 percent sulfur by weight)

Natural gas or propane only, or in combination with any of the other fuels or fuel combinations listed above

[Rules 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C.; and, PSD-FL-008(B)]

E.4. Hours of Operation. This emissions unit is allowed to 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.}

Particulate Matter

E.5. Particulate matter emitted to the atmosphere from the boiler shall not exceed:

(1)	Mode of Firing	Pound / MMBtu Heat Input	
	Coal	0.044	
	Coal/Petroleum Coke	0.044	
	Coal/Refuse	0.050	
	Coal/Petroleum Coke/Refuse	0.050	
	Oil	0.070	
	Oil/Refuse	0.075	

(2) Exhibit greater than 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity.

[40 CFR 60.42(a)(2); and, PSD-FL-008(B)]

Sulfur Dioxide

E.6. On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of:

FINAL Permit No.: 1050004-003-AV

- (1) 340 nanograms per joule heat input (0.80 lb per million Btu) derived from liquid fossil fuel or liquid fossil fuel and wood residue.
- (2) 520 nanograms per joule heat input (1.2 lb per million Btu) derived from solid fossil fuel or solid fossil fuel and wood residue, except as provided in 40 CFR 60.43(e). [40 CFR 60.43(a)(1) and (2)]
- **E.7.** When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) shall be determined by proration using the following formula:

$$PS_{SO2} = [y(340) + z(520)]/(y+z)$$

where:

PS_{SO2} is the prorated standard for sulfur dioxide when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired,

y is the percentage of total heat input derived from liquid fossil fuel, and z is the percentage of total heat input derived from solid fossil fuel.

[40 CFR 60.43(b)]

E.8. Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels.

[40 CFR 60.43(c)]

E.9. A flue gas desulfurization system will be installed to treat exhaust gases and will operate such that whenever coal or blends of coal and petroleum coke or refuse are burned, sulfur dioxide gases discharged to the atmosphere from the boiler shall not exceed 10 percent of the potential combustion concentration (90 percent reduction), or 35 percent of the potential combustion concentration (65 percent reduction), when emissions are less than 0.75 pound per million Btu heat input. Compliance with the percent reduction requirement shall be determined on a 30-day rolling average. This compliance information shall be retained for a period of five years and made available by the City upon request of the Department. Whenever blends of petroleum coke with other fuels are co-fired, sulfur dioxide emissions shall not exceed 0.718 pound per million Btu heat input based on a 30-day rolling average and shall comply with the reduction requirements given above.

[PSD-FL-008(B) and Rule 62-213.440, F.A.C.]

FINAL Permit No.: 1050004-003-AV

- **E.10.** The burning of high sulfur oil (greater than 0.5 percent sulfur by weight) or a combination of high sulfur oil and municipal refuse as an emergency fuel without the use of the SO₂ scrubber will be allowed only when the flue gas desulfurization system malfunctions to the extent that the burning of coal would cause emission limitations to be exceeded. Sulfur dioxide emitted to the atmosphere from the boiler shall not exceed 0.8 pound per million Btu heat input under this condition. [PSD-FL-008(B)]
- **E.11.** During malfunctions of equipment which cause an interruption of the coal feed to the boiler, the burning of high sulfur oil (greater than 0.5 percent sulfur by weight) or a combination of high sulfur oil and municipal refuse will be allowed only if all flue gases are fully scrubbed by the SO₂ scrubber. Sulfur dioxide emitted to the atmosphere from the boiler shall not exceed 0.8 pound per million Btu heat input under this condition.

 [PSD-FL-008(B)]

E.12. Continuous burning of natural gas, low sulfur fuel oil (less than or equal to 0.5 percent sulfur by weight), or combinations of these two fuels with or without the use of the SO₂ scrubber will be allowed. [PSD-FL-008(B)]

Nitrogen Oxides

- **E.13.** On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO₂ in excess of:
- (1) 86 nanograms per joule heat input (0.20 lb per million Btu) derived from gaseous fossil fuel.
- (2) 129 nanograms per joule heat input (0.30 lb per million Btu) derived from liquid fossil fuel, liquid fossil fuel and wood residue, or gaseous fossil fuel and wood residue.
- (3) 300 nanograms per joule heat input (0.70 lb per million Btu) derived from solid fossil fuel or solid fossil fuel and wood residue (except lignite or a solid fossil fuel containing 25 percent, by weight, or more of coal refuse).

[40 CFR 60.44(a)(1), (2), & (3)]

E.14. Except as provided under paragraphs 40 CFR 60.44(c) and (d), when different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) is determined by proration using the following formula:

FINAL Permit No.: 1050004-003-AV

 $PS_{NOx} = \underline{w(260) + x(86) + y(130) + z(300)}$ $\underline{w + x + y + z}$

where:

 PS_{NOx} = is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired;

w = is the percentage of total heat input derived from lignite;

x = is the percentage of total heat input derived from gaseous fossil fuel;

y = is the percentage of total heat input derived from liquid fossil fuel; and,

z = is the percentage of total heat input derived from solid fossil fuel (except lignite).

[40 CFR 60.44(b)]

Excess Emissions

- **E.15.** Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:
- (1) <u>Opacity.</u> Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.
- (2) Sulfur dioxide. Excess emissions for affected facilities are defined as:
 - (i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard under 40 CFR 60.43.

[40 CFR 60.45(g)(1), & (2)]

E.16. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.17. 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.]

FINAL Permit No.: 1050004-003-AV

E.18. In addition to the requirements of 40 CFR 60.7, each excess emissions report shall include the periods of oil consumption due to flue gas desulfurization system malfunction. [PSD-FL-008]

Monitoring of Operations

E.19. Determination of Process Variables.

- (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

{Permitting note: 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.20.** In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of 40 CFR 60 or other methods and procedures as specified in 40 CFR 60.46, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.46(d). [40 CFR 60.46(a)]
- **E.21.** The owner or operator shall determine compliance with the particulate matter, SO_2 , and NO_X standards in 40 CFR 60.42, 60.43, and 60.44 as follows:
- (1) The emission rate (E) of particulate matter, SO_2 , or NO_X shall be computed for each run using the following equation:

$$E = C F_d (20.9)/(20.9 - \% O_2)$$

E = emission rate of pollutant, ng/J (1b/million Btu).

C = concentration of pollutant, ng/dscm (1b/dscf).

% O_2 = oxygen concentration, percent dry basis.

 F_d = factor as determined from Method 19.

FINAL Permit No.: 1050004-003-AV

- (2) Method 5 shall be used to determine the particular matter concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems and Method 5B shall be used to determine the particulate matter concentration (C) after FGD systems.
 - (i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train may be set to provide a gas temperature no greater than 160 ± 14 °C (320 ± 25 °F).
 - (ii) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (% O_2). The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab sampling procedure is used, the O_2 concentration for the run shall be the arithmetic mean of all the individual O_2 sample concentrations at each traverse point.
 - (iii) If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 traverse points.
- (3) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.
- (4) Method 6 shall be used to determine the SO₂ concentration.
 - (i) The sampling site shall be the same as that selected for the particulate sample. The sampling location in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). The sampling time and sample volume for each sample run shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Two samples shall be taken during a 1-hour period, with each sample taken within a 30-minute interval.
 - (ii) The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (% O_2). The O_2 sample shall be taken simultaneously with, and at the same point as, the SO_2 sample. The SO_2 emission rate shall be computed for each pair of SO_2 and O_2 samples. The SO_2 emission rate (E) for each run shall be the arithmetic mean of the results of the two pairs of samples.
- (5) Method 7 shall be used to determine the NO_X concentration.
 - (i) The sampling site and location shall be the same as for the SO₂ sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.
 - (ii) For each NO_X sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (% O_2). The sample shall be taken simultaneously with, and at the same point as, the NO_X sample.
- (iii) The NO_X emission rate shall be computed for each pair of NO_X and O₂ samples. The NO_X emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples. [40 CFR 60.46(b)(1), (2), (3), (4), & (5)]

FINAL Permit No.: 1050004-003-AV

- **E.22.** When combinations of fossil fuels or fossil fuel and wood residue are fired, the owner or operator (in order to compute the prorated standard as shown in 40 CFR 60.43(b) and 60.44(b)) shall determine the percentage (w, x, y, or z) of the total heat input derived from each type of fuel as follows:
- (1) The heat input rate of each fuel shall be determined by multiplying the gross calorific value of each fuel fired by the rate of each fuel burned.
- (2) ASTM Methods D 2015-77 (solid fuels), D 240-76 (liquid fuels), or D 1826-77 (gaseous fuels) (incorporated by reference-see 40 CFR 60.17) shall be used to determine the gross calorific values of the fuels. The method used to determine the calorific value of wood residue must be approved by the Administrator.
- (3) Suitable methods shall be used to determine the rate of each fuel burned during each test period, and a material balance over the steam generating system shall be used to confirm the rate.

 [40 CFR 60.46(c)(1), (2), & (3)]
- **E.23.** The owner or operator may use the following as alternatives to the reference methods and procedures in 40 CFR 60.46 or in other sections as specified:
- (1) The emission rate (E) of particulate matter, SO_2 and NO_X may be determined by using the Fc factor, provided that the following procedure is used:
 - (i) The emission rate (E) shall be computed using the following equation:

$$E = C F_c (100 / \% CO_2)$$

where:

E = emission rate of pollutant, ng/J (lb/million Btu).

C = concentration of pollutant, ng/dscm (lb/dscf).

% CO_2 = carbon dioxide concentration, percent dry basis.

 F_c = factor as determined in appropriate sections of Method 19.

- (ii) If and only if the average F_c factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O_2 and CO_2 concentration according to the procedures in 40 CFR 60.46(b) (2)(ii), (4)(ii), or (5)(ii). Then if F_o (average of three runs), as calculated from the equation in Method 3B, is more than \pm 3 percent than the average F_o value, as determined from the average values of F_d and F_c in Method 19, i.e., F_{oa} =0.209 (F_{da} / F_{ca}), then the following procedure shall be followed:
 - (A) When F_o is less than 0.97 F_{oa} , then E shall be increased by that proportion under 0.97 F_{oa} , e.g., if F_o is 0.95 F_{oa} , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.

FINAL Permit No.: 1050004-003-AV

- (B) When F_o is less than 0.97 F_{oa} and when the average difference (\overline{d}) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{oa} , e.g., if F_o is 0.95 F_{oa} , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
- (C) When F_0 is greater than 1.03 F_{0a} and when \overline{d} is positive, then E shall be decreased by that proportion over 1.03 F_{0a} , e.g., if F_0 is 1.05 F_{0a} , E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
- (2) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack gas temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). The procedures of sections 2.1 and 2.3 of Method 5B may be used with Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after wet FGD systems if the effluent gas is saturated or laden with water droplets.
- (3) Particulate matter and SO₂ may be determined simultaneously with the Method 5 train provided that the following changes are made:
 - (i) The filter and impinger apparatus in sections 2.1.5 and 2.1.6 of Method 8 is used in place of the condenser (section 2.1.7) of Method 5.
 - (ii) All applicable procedures in Method 8 for the determination of SO₂ (including moisture) are used.
- (4) For Method 6, Method 6C may be used. Method 6A may also be used whenever Methods 6 and 3B data are specified to determine the SO₂ emission rate, under the conditions in 40 CFR 60.46(d)(1).
- (5) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the O_2 concentration (O_2) for the emission rate correction factor.
- (6) For Method 3, Method 3A or 3B may be used.
- (7) For Method 3B, Method 3A may be used.
- [40 CFR 60.46(d)(1), (2), (3), (4), (5), (6), & (7)]
- **E.24.** 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.25. Operating Rate During Testing. Testing of emissions shall be conducted with the 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.

FINAL Permit No.: 1050004-003-AV

E.26. 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 three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

E.27. Applicable Test Procedures.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

(a) Required Sampling Time.

- 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
- 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - 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.

FINAL Permit No.: 1050004-003-AV

- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) <u>Required Flow Rate Range</u>. 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, attached as part of this permit.
- (e) <u>Allowed Modification to EPA Method 5</u>. 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.28.** 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.

[Rule 62-297.310(6), F.A.C.]

- **E.29.** 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 and/or solid fuel for a total of no more than 400 hours.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;

FINAL Permit No.: 1050004-003-AV

- 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
- c. Each NESHAP pollutant, if there is an applicable emission standard.
- 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.
- 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) <u>Waiver of Compliance Test Requirements</u>. 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.; and, SIP approved]

- **E.30.** By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

FINAL Permit No.: 1050004-003-AV

- **E.31.** 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.]

Continuous Monitoring Requirements

- **E.32.** Each owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, and either oxygen or carbon dioxide except as provided in 40 CFR 60.45(b). [40 CFR 60.45(a)]
- **E.33.** Certain of the continuous monitoring system requirements under 40 CFR 60.45(a) do not apply to owners or operators under the following conditions:
- (1) For a fossil fuel-fired steam generator that burns only gaseous fossil fuel, continuous monitoring systems for measuring the opacity of emissions and sulfur dioxide emissions are not required.
- (2) For a fossil fuel-fired steam generator that does not use a flue gas desulfurization device, a continuous monitoring system for measuring sulfur dioxide emissions is not required if the owner or operator monitors sulfur dioxide emissions by fuel sampling and analysis under 40 CFR 60.45(d).
- (3) Notwithstanding 40 CFR 60.13(b), installation of a continuous monitoring system for nitrogen oxides may be delayed until after the initial performance tests under 40 CFR 60.8 have been conducted. If the owner or operator demonstrates during the performance test that emissions of nitrogen oxides are less than 70 percent of the applicable standards in 40 CFR 60.44, a continuous monitoring system for measuring nitrogen oxides emissions is not required. If the initial performance test results show that nitrogen oxide emissions are greater than 70 percent of the applicable standard, the owner or operator shall install a continuous monitoring system for nitrogen oxides within one year after the date of the initial performance tests under 40 CFR 60.8 and comply with all other applicable monitoring requirements under 40 CFR 60.
- (4) If an owner or operator does not install any continuous monitoring systems for sulfur oxides and nitrogen oxides, as provided under 40 CFR 60.45(b)(1) and (b)(3) or (b)(2) and (b)(3), a continuous monitoring system for measuring either oxygen or carbon dioxide is not required.

 [40 CFR 60.45(b)(1), (2), (3), & (4)]

FINAL Permit No.: 1050004-003-AV

- **E.34.** For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:
- (1) Methods 6, 7, and 3B, as applicable, shall be used for the performance evaluations of sulfur dioxide and nitrogen oxides continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B are given in 40 CFR 60.46(d).
- (2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60.
- (3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined as follows:

[In parts per million]

Fossil fuel	Span value for sulfur dioxide	
Gas	{1} 1,000	_
Solid	1,500	
Combinations	1,000y+1,500z	

{1}Not applicable.

where:

- x = the fraction of total heat input derived from gaseous fossil fuel, and
- y = the fraction of total heat input derived from liquid fossil fuel, and
- z = the fraction of total heat input derived from solid fossil fuel.
- (4) All span values computed under 40 CFR 60.45(c)(3) for burning combinations of fossil fuels shall be rounded to the nearest 500 ppm.
- (5) For a fossil fuel-fired steam generator that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Administrator's approval.

[40 CFR 60.45(c)(1), (2), (3), (4), & (5)]

FINAL Permit No.: 1050004-003-AV

- **E.35.** For any continuous monitoring system installed under 40 CFR 60.45(a), the following conversion procedures shall be used to convert the continuous monitoring data into units of the applicable standards (ng/J, lb/million Btu):
- (1) When a continuous monitoring system for measuring oxygen is selected, the measurement of the pollutant concentration and oxygen concentration shall each be on a consistent basis (wet or dry). Alternative procedures approved by the Administrator shall be used when measurements are on a wet basis. When measurements are on a dry basis, the following conversion procedure shall be used:

 $E = CF[20.9/(20.9-percent O_2)]$

where:

E, C, F, and % O₂ are determined under 40 CFR 60.45(f).

(2) When a continuous monitoring system for measuring carbon dioxide is selected, the measurement of the pollutant concentration and carbon dioxide concentration shall each be on a consistent basis (wet or dry) and the following conversion procedure shall be used:

 $E = CF_c [100/percent CO_2]$

where:

E, C, F_c and % CO₂ are determined under 40 CFR 60.45(f). [40 CFR 60.45(e)(1) and (2)]

- E.36. The values used in the equations under 40 CFR 60.45(e) (1) and (2) are derived as follows:
- (1) E = pollutant emissions, ng/J (lb/million Btu).
- (2) C = pollutant concentration, ng/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each one-hour period by 4.15×10^4 M ng/dscm per ppm (2.59×10^{-9} M lb/dscf per ppm) where M = pollutant molecular weight, g/g-mole (lb/lb-mole). M = 64.07 for sulfur dioxide and 46.01 for nitrogen oxides.
- (3) % O_2 , % CO_2 = oxygen or carbon dioxide volume (expressed as percent), determined with equipment specified under 40 CFR 60.45(a).
- (4) F, F_c = a factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), and a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted (F_c), respectively. Values of F and F_c are given as follows:
 - (i) For anthracite coal as classified according to ASTM D388-77 (incorporated by reference-see 40 CFR 60.17), $F = 2.723 \times 10^{-17}$ dscm/J (10,140 dscf/million Btu and $F_c = 0.532 \times 10^{-17}$ scm CO_2 /J (1,980 scf CO_2 /million Btu).

FINAL Permit No.: 1050004-003-AV

(ii) For subbituminous and bituminous coal as classified according to ASTM D388-77 (incorporated by reference-see 40 CFR 60.17), $F = 2.637 \times 10^{-7}$ dscm/J (9,820 dscf/million Btu) and $F_c = 0.486 \times 10^{-7} \text{ scm CO}_2 / J (1,810 \text{ scf CO}_2 / \text{million Btu}).$

(iii) For liquid fossil fuels including crude, residual, and distillate oils, $F = 2.476 \times 10^{-7}$ dscm/J

- (9,220 dscf/million Btu) and $F_c = 0.384 \times 10^{-7}$ scm CO_2 /J (1,430 scf CO_2 /million Btu). (iv) For gaseous fossil fuels, $F = 2.347 \times 10^{-7}$ dscm/J (8,740 dscf/million Btu). For natural gas, propane, and butane fuels, $F_c = 0.279 \times 10^{-7}$ scm CO_2 /J (1,040 scf CO_2 /million Btu) for natural gas, 0.322×10^{-7} scm CO₂ /J (1,200 scf CO₂/million Btu) for propane, and 0.338×10^{-7} scm CO₂ /J (1,260 scf CO₂ /million Btu) for butane.
- (5) The owner or operator may use the following equation to determine an F factor (dscm/J or dscf/million Btu) on a dry basis (if it is desired to calculate F on a wet basis, consult the Administrator) or F_c factor (scm CO₂/J, or scf CO₂ /million Btu) on either basis in lieu of the F or F_c factors specified in 40 CFR 60.45(f)(4):

$$F = 10^{-6} \frac{[227.2 \text{ (pct. II)} + 95.5 \text{ (pct. C)} + 35.6 \text{ (pct. S)} + 8.7 \text{ (pct. N)} - 28.7 \text{ (pct. O)}]}{GCV}$$

$$F_c = \frac{2.0 \times 10^{-5} \text{ (pct. C)}}{\text{GCV}}$$
(SI units)

$$F = 10^6 \ \frac{3.64(\%H) + 1.53(\%C) + 0.57(\%S) + 0.14(\%N) - 0.46(\%O)}{GCV}$$
 (English units)

$$F_c = \frac{20.0(\%C)}{GCV}$$
(SI units)

$$F_c = \frac{321 \times 10^3 \text{ (\%C)}}{\text{GCV}}$$
(English units)

FINAL Permit No.: 1050004-003-AV

- (i) H, C, S, N, and O are content by weight of hydrogen, carbon, sulfur, nitrogen, and oxygen (expressed as percent), respectively, as determined on the same basis as GCV by ultimate analysis of the fuel fired, using ASTM method D3178-74 or D3176 (solid fuels) or computed from results using ASTM method D1137-53(75), D1945-64(76), or D1946-77 (gaseous fuels) as applicable. (These five methods are incorporated by reference-see 40 CFR 60.17.)
- (ii) GCV is the gross calorific value (kJ/kg, Btu/lb) of the fuel combusted determined by the ASTM test methods D2015-77 for solid fuels and D1826-77 for gaseous fuels as applicable.

(These two methods are incorporated by reference-see 40 CFR 60.17.)

- (iii) For affected facilities which fire both fossil fuels and nonfossil fuels, the F or F_c value shall be subject to the Administrator's approval.
- (6) For affected facilities firing combinations of fossil fuels or fossil fuels and wood residue, the F or F_c factors determined by paragraphs 40 CFR 60.45(f)(4) or (f)(5) shall be prorated in accordance with the applicable formula as follows:

$$F = \sum_{i=1}^{n} X_i F_i \quad \text{or} \qquad F_c = \sum_{i=1}^{n} X_i (F_c)_i$$

where:

X_i = the fraction of total heat input derived from each type of fuel (e.g. natural gas, bituminous coal, wood residue, etc.)

 F_i or $(F_c)_i$ = the applicable F or F_c factor for each fuel type determined in accordance with paragraphs (f)(4) and (f)(5) of this section.

n =the number of fuels being burned in combination.

[40 CFR 60.45(f)(1), (2), (3), (4), (5), & (6)]

E.37. Continuous monitors shall be installed and operated in accordance with 40 CFR 60.45 and 60.13. In addition, an ASTM-certified automatic solid fossil fuel sampler shall be installed which produces a representative daily sample for analysis of sulfur, moisture, heating value and ash. The solid fossil fuel data shall be used in conjunction with emissions factors and the continuous monitoring data to calculate SO_2 reduction.

[PSD-FL-008(B)]

Recordkeeping and Reporting Requirements

E.38. Excess emission and monitoring system performance reports shall be submitted to the Administrator for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c). The summary report form shall contain the information and be in the format shown in figure 1 (attached to this permit) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility. [40 CFR 60.7(d) & 60.45(g)]

Rule 62-210.700(6), F.A.C.]

E.39. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department 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 Department.

FINAL Permit No.: 1050004-003-AV

E.40. Submit to the Department a written report of emissions in excess of emission limiting 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. [Rule 62-213.440, F.A.C.]

E.41. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.

FINAL Permit No.: 1050004-003-AV

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

[Rule 62-297.310(8), F.A.C.]

Miscellaneous Requirements.

E.42. The permittee shall comply with the requirements contained in Appendix 40 CFR 60, Subpart A, attached to this permit.

[Rule 62-204.800(7)(d), F.A.C.]

E.43. The City shall maintain and submit to the Department on an annual basis for a period of five years from the date that the unit is initially co-fired with petroleum coke, information demonstration in accordance with 40 CFR 52.21(b)(33) and 40 CFR 52.21(b)(21)(v) that the operational changes did not result in emissions increases of carbon monoxide, nitrogen oxides, or sulfuric acid mist. [PSD-FL-008(B)]

FINAL Permit No.: 1050004-003-AV

Section IV. This section is the Acid Rain Part.

Operated by: Lakeland Electric & Water Utilities

ORIS code: 676

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		
-001	Boiler - McIntosh Unit 1		
-005	Boiler - McIntosh Unit 2		
-006	Boiler - McIntosh Unit 3		

A.1. The Phase II permit application(s) submitted for this facility, as approved by the Department, are 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 below:

a. 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.]

FINAL Permit No.: 1050004-003-AV

A.2. Sulfur dioxide (SO_2) allowance allocations and nitrogen oxide (NO_x) requirements for each Acid Rain unit is as follows:

E.U. ID No.	EPA ID	Year	2000	2001	2002
-001	No. 01	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	897*	897*	897*
-005	No. 02	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	1019*	1019*	1019*
-006	No. 03	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	9848*	9848*	9848*
		NOx limit	**	**	**

^{*} 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 increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(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)1., 2. & 3., F.A.C.]
- A.4. <u>Fast-Track Revisions of Acid Rain Parts.</u> 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.

[Rules 62-213.413 and 62-214.370(4), F.A.C.]

- A.5. <u>Statement of Compliance</u>. 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.]
- A.6. Comments, notes, and justifications: None.

^{**} If applicable, by January 1, 1999, this Part will be reopened to add NOx requirements in accordance with the regulations implementing section 407 of the Clean Air Act.

FINAL Permit No.: 1050004-003-AV

Subsection B. This subsection addresses Acid Rain, Phase I.

{Permitting note: The U.S. EPA issues Acid Rain Phase I permit(s)}

The emissions unit listed below is regulated under Acid Rain Part, Phase I, for Lakeland Electric & Water Utilities, C. D. McIntosh, Jr. Power Plant, Facility ID No.: 1050004, ORIS code: 676

E.U.

ID No. **Brief Description**

-006 Boiler - McIntosh Unit 3

The provisions of the federal Acid Rain, Phase I permit(s), including Early Election Plans for NO_X, govern(s) the above listed emissions unit(s) through December 31, 1999. The provisions of the Phase II permit govern(s) those emissions unit(s) from January 1, 2000 through the expiration date of this Title V permit. The Phase II permit governs all other affected units for the effective period of this permit.

- **B.1.** The owners and operators of these Phase I acid rain unit(s) must comply with the standard requirements and special provisions set forth in the permit(s) listed below:
- a. Phase I permit dated 03/27/97.

[Chapter 62-213, F.A.C.]

B.2. Comments, notes, and justifications: none



Department of Environmental Protection

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

Virginia B. Wetherell Secretary

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Mr. Ronald W. Tomlin Assistant Managing Director Lakeland Electric & Water Utilities 501 East Lemon Street Lakeland, Florida 33801-5079

ORDER EXTENDING PERMIT EXPIRATION DATE

C. D. McIntosh, Jr. Power Plant, Facility ID No.: 1050004

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 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 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.

C. D. McIntosh, Jr. Power Plant, Facility ID No.: 1050004 Page 4 of 4

DONE AND ORDERED this day of for, 1998 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

The undersigned duly designated deputy agency clerk (hereby certifies that this order and all copies were sent by certified mail before the close of business on $\frac{2}{2}$ to the person(s) listed:

Ms. Farzie Shelton, Lakeland Electric & Water Utilities

Mr. Bill Thomas, PE, FDEP, SWD

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)

(Date)



Department of Environmental Protection

Ed Svec

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

February 9, 1998

Virginia B. Wetherell Secretary

Mr. Ronald W. Tomlin Assistant Managing Director Lakeland Electric & Water Utilities 501 East Lemon Street Lakeland, Florida 33801-5079

Re:

PROPOSED Title V Permit No.: 1050004-003-AV

C. D. McIntosh, Jr. Power Plant

Dear Mr. Tomlin:

One copy of the "<u>PROPOSED PERMIT DETERMINATION</u>" for the C. D. McIntosh, Jr. Power Plant located at 3030 East Lake Parker Drive, Lakeland, Polk County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit has become a PROPOSED permit.

An electronic version of this determination has been posted on the Division of Air Resource Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The web site address is http://www.dep.state.fl.us/air.

Pursuant to Section 403.0872(6), Florida Statutes, if no objection to the PROPOSED permit is made by the USEPA within 45 days, the PROPOSED permit will become a FINAL permit no later than 55 days after the date on which the PROPOSED permit was mailed (posted) to USEPA. If USEPA has an objection to the PROPOSED permit, the FINAL permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

If you should have any questions, please contact Edward J. Svec at 850/488-1344.

Sincerely,

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CHF/s

Enclosures

copy furnished to:
Kennard Kosky, P.E., Golder Associates, Inc.
Farzie Shelton, Lakeland Electric & Water Utilities
Bill Thomas, P.E., FDEP SWD
Ms. Yolanda Adams, USEPA, Region 4 (INTERNET E-mail Memorandum)
Ms. Carla E. Pierce, USEPA, Region 4 (INTERNET E-mail Memorandum)

PROPOSED PERMIT DETERMINATION

PROPOSED Permit No.: 1050004-003-AV

Page 1 of 31

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" to Lakeland Electric & Water Utilities for the C. D. McIntosh, Jr. Power Plant located at 3030 East Lake Parker Drive, Lakeland, Polk County was clerked on June 4, 1997. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was published in the Ledger on June 18, 1997. The DRAFT Title V Air Operation Permit was available for public inspection at the Department's Southwest District office in Tampa and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was received on June 25, 1997.

II. Public Comment(s).

Comments were received and the DRAFT Title V Operation Permit was changed. The comments were not considered significant enough to reissue the DRAFT Title V Permit and require another Public Notice. Comments were received from two respondents during the 30 (thirty) day public comment period. Listed below is each comment letter in the chronological order of receipt and a response to each comment in the order that the comment was received. The comment(s) will not be restated. Where duplicative comments exist, the original response is referenced.

- A. Letter from Ms. Farzie Shelton dated June 30, 1997, and received on July 2, 1997.
- 1. R: In the application, the only fuel listed as a startup fuel was propane. There was no request for fuels used during normal operation to be also used as startup fuels. The requested language change to specific condition E.3. would also allow fuel percentages (i.e. 100 percent petroleum coke) for startup prohibited under normal operations. In order to eliminate any differences in interpretation of the definition of startup, the permit conditions will address only the fuels allowed to be fired by each unit with an exception for on-specification used oil. As a result of this comment, specific conditions A.3., D.3., and E.3. are changed as follows.

From:

- A.3. Methods of Operation. Fuels.
- a. Startup: The only fuel allowed to be burned is propane.
- b. Normal: The only fuels allowed to be burned are natural gas, No. 6 Fuel Oil, On-Specification Used Oil and combinations of natural gas, No. 6 Fuel Oil and/or On-Specification Used Oil.

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

Page 2 of 31

D.3. Methods of Operation. Fuels.

a. Startup: The only fuel allowed to be burned is propane.

b. Normal: The only fuels allowed to be burned are natural gas, No. 6 Fuel Oil, No. 2 Fuel Oil and combinations of natural gas, No. 6 Fuel Oil and/or No. 2 Fuel Oil. [Rule 62-213.410, F.A.C.]

E.3. Methods of Operation - Fuels. The following fuels may be burned:

- a. Startup: The only fuel allowed to be burned is propane.
- b. Normal:

Coal only

Low sulfur fuel oil only (≤ 0.5 percent sulfur by weight)

Coal and up to 10 percent refuse (based on heat input)

Low sulfur fuel oil and up to 10 percent refuse (based on heat input)

Coal and up to 20 percent petroleum coke (based on weight)

Coal and up to 20 percent petroleum coke (based on weight) and 10 percent refuse (based on heat input)

High sulfur fuel oil (> 0.5 percent sulfur by weight)

Natural gas only, or in combination with any of the other fuels or fuel combinations listed above

[Rules 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C.; and, PSD-FL-008(B)]

To:

A.3. Methods of Operation. Fuels. The only fuels allowed to be burned are natural gas, propane, No. 6 Fuel Oil, On-Specification Used Oil and combinations of natural gas, propane, No. 6 Fuel Oil and/or On-Specification Used Oil. On-Specification used oil containing any quantifiable levels of PCBs can only be fired when the emissions unit is at normal operating temperatures.

[Rule 62-213.410, F.A.C.; and, 40 CFR 271.20(e)(3)]

D.3. Methods of Operation. Fuels. The only fuels allowed to be burned are natural gas, propane, No. 6 Fuel Oil, No. 2 Fuel Oil and combinations of natural gas, No. 6 Fuel Oil and/or No. 2 Fuel Oil.

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

Page 3 of 31

E.3. Methods of Operation - Fuels. The only fuels allowed to be burned are:

Coal only

Low sulfur fuel oil only (≤ 0.5 percent sulfur by weight)

Coal and up to 10 percent refuse (based on heat input)

Low sulfur fuel oil and up to 10 percent refuse (based on heat input)

Coal and up to 20 percent petroleum coke (based on weight)

Coal and up to 20 percent petroleum coke (based on weight) and 10 percent refuse (based on heat input)

High sulfur fuel oil (> 0.5 percent sulfur by weight)

Natural gas or propane only, or in combination with any of the other fuels or fuel combinations listed above

[Rules 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C.; and, PSD-FL-008(B)]

2. R: Specific conditions A.16., D.15., and E.16. quote Rule 62-297.310(5), F.A.C., which requires "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." It further states "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." It therefore seems logical that when this rule is applied, the heat input can be determined using the heating value of the fuel and the amount of fuel fired. The applicant is concerned that the Acid Rain flow CEMs, when used to calculate Btu heat input, will produce a result indicating an exceedence of the maximum heat input limit. To eliminate this concern, specific conditions A.1., D.1., and E.1. are changed, as follows:

From:

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

<u>Unit No.</u>	MMBtu/hr Heat Input	Fuel Type
1	985	Natural Gas
	950	No. 6 Fuel Oil
	950	Used Oil

When a blend of fuel oil, "on-specification" used oil or natural gas is fired, the heat input is prorated based on the percent heat input of each fuel.

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

Page 4 of 31

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

<u>Unit No.</u>	MMBtu/hr Heat Input	<u>Fuel Type</u>
2	1,184.5	Natural Gas
	1,115	No. 6 Fuel Oil
	1,115	No. 2 Fuel Oil

When a blend of fuel oil and natural gas is fired, the heat input is prorated based on the percent heat input of each fuel.

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

E.1. Capacity. The maximum heat input rate is 3,640 MMBtu per hour. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

To:

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

<u>Unit No.</u>	MMBtu/hr Heat Input	Fuel Type
1	985	Natural Gas
	950	No. 6 Fuel Oil
	950	Used Oil

When a blend of fuel oil, "on-specification" used oil or natural gas is fired, the heat input is prorated based on the percent heat input of each fuel. The Acid Rain CEM will not be a method of compliance for the determination of the heat input rate.

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

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

<u>Unit No.</u>	MMBtu/hr Heat Input	<u>Fuel Type</u>
2	1,184.5	Natural Gas
	1,115	No. 6 Fuel Oil
	1,115	No. 2 Fuel Oil

When a blend of fuel oil and natural gas is fired, the heat input is prorated based on the percent heat input of each fuel. The Acid Rain CEM will not be a method of compliance for the determination of the heat input rate.

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

E.1. <u>Capacity</u>. The maximum heat input rate is 3,640 MMBtu per hour. The Acid Rain CEM will not be a method of compliance for the determination of the heat input rate. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

Page 5 of 31

- 3. R: Language from the state operating permit was used in the description of the emissions unit -001. The description of the boiler when firing No. 6 fuel oil stated "or No. 6 fuel oil, having a maximum sulfur content of 2.5 percent by weight, at a maximum heat input rate of 950 million Btu per hour (approximately 6,300 gallons per hour)." The Department recognizes that the heating value of a gallon of fuel oil can vary. However, the Department does not feel the need to account for this variability when the emissions unit's standards are based on a weight of pollutant per million Btu heat input. The description will remain as noticed.
- **4. R:** The fuels allowed for emissions unit -001 are consistent with the Title V permit application, including your response to a request for additional information dated February 7, 1997 which included updated segment pages "covering all different types of fuel burned". Segment pages were submitted for "Residual (No. 6) Oil", "Natural Gas", "Propane", and "On-Specification used oil as defined in 40 CFR 279.11 and generated by City of Lakeland", only. The conditions will remain as noticed.
- **5. R:** The EPA has commented previously that the fuel analyses methods are federally enforceable and this change will not be made.
- 6. R: The Department agrees that the permittee can also provide the fuel analyses. As a result of this comment, specific conditions A.15., A.20., B.9., and C.9. are changed as follows:

From:

- A.15. Sulfur Dioxide. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor upon each fuel delivery. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. See specific conditions A.10., A.20. and A.21.
- A.20. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards. The permittee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor upon each fuel delivery. See specific conditions A.10. and A.21.

[Rules 62-213.440, 62-296.405(1)(e)3. and 62-297.401, F.A.C.; and, AO 53-243945]

Page 6 of 31

B.9. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor upon each fuel delivery. See specific condition **B.12**. [Rule 62-213.440, F.A.C.]

C.9. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor upon each fuel delivery. See specific condition **C.12**. [Rule 62-213.440, F.A.C.]

To:

A.15. Sulfur Dioxide. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. See specific conditions A.10., A.20. and A.21.

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

- A.20. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards. The permittee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. See specific conditions A.10. and A.21.

 [Rules 62-213.440, 62-296.405(1)(e)3. and 62-297.401, F.A.C.; and, AO 53-243945]
 - **B.9.** The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor or the permittee upon each fuel delivery. See specific condition **B.12**.

[Rule 62-213.440, F.A.C.]

C.9. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor or the permittee upon each fuel delivery. See specific condition C.12.

[Rule 62-213.440, F.A.C.]

Page 7 of 31

7. R: The Department recognizes that ASTM Methods will be periodically updated, as was the case with the June 1997 updates. As a result of this comment, specific conditions A.21., B.12., and C.12. will be changed as follows:

From:

A.21. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91. [Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.]

- **B.12.** The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91. [Rules 62-213.440 and 62-297.440, F.A.C.; and, AO 53-244726]
- C.12. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91. [Rules 62-213.440 and 62-297.440, F.A.C.; and, AO 53-244727]

To:

A.21. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or the respective successor ASTM method(s). [Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.]

B.12. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or the respective successor ASTM method(s).

[Rules 62-213.440 and 62-297.440, F.A.C.; and, AO 53-244726]

C.12. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or the respective successor ASTM method(s).

[Rules 62-213.440 and 62-297.440, F.A.C.; and, AO 53-244727]

8. R: Specific condition A.30. provides the Department with the assurance that the used oil is "onspecification" and proof the used oil does not contain detectable levels of PCBs, if the used oil is fired at times which the boiler is not at normal operating temperatures. However, the Department will allow the use of previous analytical test results if the blend of used oil is assumed to contain the highest value of each component from all previous analyses. As a result of this comment, specific condition A.30. is changed as follows:

From:

A.30. Compliance with the "on-specification" used oil requirements will be determined from a sample collected from each batch (1,000 gallons minimum) delivered for firing. See specific condition **A.11**.

[AO 53-243945]

Page 8 of 31

To:

A.30. Compliance with the "on-specification" used oil requirements will be determined as follows:

- (a) Analysis of a sample collected from each batch delivered for firing; or,
- (b) The new batch delivery is from a collection site that has an acceptable analysis already on file with the facility and the analytical results are assumed by the facility for the batch.

For quantification purposes, the highest concentration of each constituent as determined by any analysis is assumed to be the concentration of the constituent of the blended used oil. See specific condition **A.11**.

[AO 53-243945]

- 9. R: The requirements for compliance tests when an emissions unit is operated for less than 400 hours is contained in specific condition **B.15**. No further clarification is required.
- 10. R: The Department agrees with the request. As a result of this comment, emissions unit -004's description is changed as follows:

From:

Gas Turbine Peaking Unit 1 consists of a gas turbine which drives a generator producing electrical power at a maximum rated output of 20 megawatts. The gas turbine is fired with natural gas, or No. 2 fuel oil with a maximum sulfur content of 0.5 percent by weight. The maximum fuel firing rate is 320 million cubic feet per hour of natural gas (approximately 330 million Btu per hour) or 2,310 gallons per hour of No. 2 fuel oil (approximately 320 million Btu per hour). Gas Turbine Peaking Unit 1 began commercial service in 1973.

To:

Gas Turbine Peaking Unit 1 consists of a gas turbine which drives a generator producing electrical power at a nominal nameplate rating of 20 megawatts. The gas turbine is fired with natural gas, or No. 2 fuel oil with a maximum sulfur content of 0.5 percent by weight. The maximum fuel firing rate is 320 million cubic feet per hour of natural gas (approximately 330 million Btu per hour) or 2,310 gallons per hour of No. 2 fuel oil (approximately 320 million Btu per hour). Gas Turbine Peaking Unit 1 began commercial service in 1973.

11. R: The Department will add the heat input rates to the description of capacity for emissions units -002, -003, and -004. However, since the fuel consumption rates have been accepted by the permittee in previous operating permits and consistent with our agreement to retain conditions from operating permits which are not obsolete, the fuel usage rates will remain as a limit of capacity. The comment on the requirement to submit curves with the compliance tests is a quote of the rule and will not be changed. As a result of this comment, specific conditions B.1. and C.1. are changed as follows:

From

B.1. Permitted Capacity. The maximum firing rate of each diesel engine peaking unit is 201.6 gallons per hour firing No. 2 fuel oil.

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

Page 9 of 31

C.1. <u>Permitted Capacity</u>. The maximum firing rate of the turbine is 320 million cubic feet per hour when firing natural gas or 2,310 gallons per hour when firing No. 2 fuel oil. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

To:

B.1. Permitted Capacity.

- a. The maximum heat input rate of each diesel engine peaking unit is 28 million Btu per hour [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]
- b. Not Federally Enforceable The maximum firing rate of each diesel engine peaking unit is 201.6 gallons per hour firing No. 2 fuel oil. [AO 53-244726]

C.1. Permitted Capacity.

a. The maximum heat input rate of the turbine is 330 million Btu per hour (lower heating value) at 30 degrees F while firing natural gas and 320 million Btu per hour (lower heating value) at 30 degrees F while firing No. 2 fuel oil.

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

- b. **Not Federally Enforceable** The maximum firing rate of the turbine is 320 million cubic feet per hour when firing natural gas or 2,310 gallons per hour when firing No. 2 fuel oil. [AO 53-244727]
- 12. R: The use of the words "unless otherwise specified" are confined to the quote of rules and will not be change.
- 13. R: The requirement for nitrogen oxides continuous emissions monitors for the 40 CFR 60, Subpart D emissions units was included because the applicant did not indicate in the application that the emissions units tested at less than 70 percent of the standard. As a result of this comment, specific conditions D.11., D.29., E.12., E.29., and E.31. are changed as follows:

From:

- **D.11.** Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:
- (1) Opacity. Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.
- (2) Sulfur dioxide. Excess emissions for affected facilities are defined as:
- (i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard under 40 CFR 60.43.
- (3) <u>Nitrogen oxides</u>. Excess emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under 40 CFR 60.44.

[40 CFR 60.45(g)(1), (2), & (3)]

Page 10 of 31

- **D.29.** For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:
- (1) Methods 6, 7, and 3B, as applicable, shall be used for the performance evaluations of sulfur dioxide continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B are given in 40 CFR 60.46(d).
- (2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60.
- (3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined as follows:

[In parts per million]

Fossil fuel	Span value for	Span value for	
	sulfur dioxide	nitrogen oxides	
Gas	{1}	500	
Liquid	1,000	500	•
Solid	1,500	1000	
Combinations	1,000y+1,500z	500(x+y)+1,000z	

{1}Not applicable.

where:

- x = the fraction of total heat input derived from gaseous fossil fuel, and
- y = the fraction of total heat input derived from liquid fossil fuel, and
- z = the fraction of total heat input derived from solid fossil fuel.
- (4) All span values computed under 40 CFR 60.45(c)(3) for burning combinations of fossil fuels shall be rounded to the nearest 500 ppm.

[40 CFR 60.45(c)(1), (2), (3), & (4)]

Page 11 of 31

- **E.12.** Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:
- (1) <u>Opacity</u>. Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.
- (2) Sulfur dioxide. Excess emissions for affected facilities are defined as:
 - (i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard under 40 CFR 60.43.
- (3) <u>Nitrogen oxides.</u> Excess emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under 40 CFR 60.44.

 [40 CFR 60.45(g)(1), (2), & (3)]
- **E.29.** Each owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions, and either oxygen or carbon dioxide except as provided in 40 CFR 60.45(b). [40 CFR 60.45(a)]
- **E.31.** For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:
- (1) Methods 6, 7, and 3B, as applicable, shall be used for the performance evaluations of sulfur dioxide and nitrogen oxides continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B are given in 40 CFR 60.46(d).
- (2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60.
- (3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined as follows:

[In parts per million]

Fossil fuel	Span value for sulfur dioxide	Span value for nitrogen oxides	
Gas	{1}	500	
Liquid	1,000	500	
Solid	1,500	1000	
Combinations	1,000y+1,500z	500(x+y)+1,000z	

{1}Not applicable.

Page 12 of 31

where:

x = the fraction of total heat input derived from gaseous fossil fuel, and

y = the fraction of total heat input derived from liquid fossil fuel, and

z = the fraction of total heat input derived from solid fossil fuel.

- (4) All span values computed under 40 CFR 60.45(c)(3) for burning combinations of fossil fuels shall be rounded to the nearest 500 ppm.
- (5) For a fossil fuel-fired steam generator that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Administrator's approval.

[40 CFR 60.45(c)(1), (2), (3), (4), & (5)]

To:

- **D.11.** Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:
- (1) <u>Opacity</u>. Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.
- (2) <u>Sulfur dioxide</u>. Excess emissions for affected facilities are defined as:
- (i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard under 40 CFR 60.43. [40 CFR 60.45(g)(1), & (2)]
- **D.29.** For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:
- (1) Methods 6, 7, and 3B, as applicable, shall be used for the performance evaluations of sulfur dioxide continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B are given in 40 CFR 60.46(d).
- (2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60.
- (3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined as follows:

Page 13 of 31

[In parts per million]

Fossil fuel	Span value for sulfur dioxide	
Gas	{1} 1,000	
SolidCombinations	1,500 1,000y+1,500z	

{1}Not applicable.

where:

- x = the fraction of total heat input derived from gaseous fossil fuel, and
- y = the fraction of total heat input derived from liquid fossil fuel, and
- z = the fraction of total heat input derived from solid fossil fuel.
- (4) All span values computed under 40 CFR 60.45(c)(3) for burning combinations of fossil fuels shall be rounded to the nearest 500 ppm.

[40 CFR 60.45(c)(1), (2), (3), & (4)]

- **E.12.** Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:
- (1) Opacity. Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.
- (2) Sulfur dioxide. Excess emissions for affected facilities are defined as:
 - (i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard under 40 CFR 60.43.

[40 CFR 60.45(g)(1), & (2)]

E.29. Each owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, and either oxygen or carbon dioxide except as provided in 40 CFR 60.45(b). [40 CFR 60.45(a)]

Page 14 of 31

- **E.31.** For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:
- (1) Methods 6, 7, and 3B, as applicable, shall be used for the performance evaluations of sulfur dioxide and nitrogen oxides continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B are given in 40 CFR 60.46(d).
- (2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60.
- (3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined as follows:

[In parts per million]

Fossil fuel	Span value for sulfur dioxide	
Gas	· {1}	
Liquid	1,000	
Solid	1,500	
Combinations	1,000y+1,500z	

{1}Not applicable.

where:

- x = the fraction of total heat input derived from gaseous fossil fuel, and
- y = the fraction of total heat input derived from liquid fossil fuel, and
- z = the fraction of total heat input derived from solid fossil fuel.
- (4) All span values computed under 40 CFR 60.45(c)(3) for burning combinations of fossil fuels shall be rounded to the nearest 500 ppm.
- (5) For a fossil fuel-fired steam generator that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Administrator's approval.
- [40 CFR 60.45(c)(1), (2), (3), (4), & (5)]
- 14. R: The Department has reviewed the construction permit, AC 53-2244, dated October 9, 1973, and the current operating permit and has determined that this emissions unit is permitted to determine compliance with the sulfur dioxide emission standard using fuel sampling and analysis. Since the emissions unit does not have a flue gas desulfurization unit, 40 CFR 60.45(b)(2) allows fuel sampling and analysis to be used in lieu of a sulfur dioxide continuous monitoring system. The Department will remove all references to sulfur dioxide EPA test methods and continuous emissions monitoring requirements. The Department will add new conditions addressing fuel sampling and analysis procedures. As a result of this comment, the following changes are made:

Page 15 of 31

From:

D.11. Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:

- (1) <u>Opacity.</u> Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.
- (2) Sulfur dioxide. Excess emissions for affected facilities are defined as:
 - (i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard under 40 CFR 60.43.

 [40 CFR 60.45(g)(1), & (2)]
- **D.17.** The owner or operator shall determine compliance with the particulate matter, SO_2 , and NO_X standards in 40 CFR 60.42, 60.43, and 60.44 as follows:
- (1) The emission rate (E) of particulate matter, SO₂, or NO_X shall be computed for each run using the following equation:

$$E = C F_d (20.9)/(20.9 - \% O_2)$$

E = emission rate of pollutant, ng/J (1b/million Btu).

C = concentration of pollutant, ng/dscm (1b/dscf).

% O_2 = oxygen concentration, percent dry basis.

 F_d = factor as determined from Method 19.

- (2) Method 5 shall be used to determine the particular matter concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems.
 - (i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train may be set to provide a gas temperature no greater than 160 ± 14 °C (320 ± 25 °F).
 - (ii) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (% O_2). The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab sampling procedure is used, the O_2 concentration for the run shall be the arithmetic mean of all the individual O_2 sample concentrations at each traverse point.
 - (iii) If the particulate run has more than 12 traverse points, the O₂ traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O₂ traverse points.
- (3) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.

Page 16 of 31

- (4) Method 6 shall be used to determine the SO₂ concentration.
 - (i) The sampling site shall be the same as that selected for the particulate sample. The sampling location in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). The sampling time and sample volume for each sample run shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Two samples shall be taken during a 1-hour period, with each sample taken within a 30-minute interval.
 - (ii) The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the O₂ concentration (%O₂). The O₂ sample shall be taken simultaneously with, and at the same point as, the SO₂ sample. The SO₂ emission rate shall be computed for each pair of SO₂ and O₂ samples. The SO₂ emission rate (E) for each run shall be the arithmetic mean of the results of the two pairs of samples.
 - (5) Method 7 shall be used to determine the NO_X concentration.
 - (i) The sampling site and location shall be the same as for the SO₂ sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.
 - (ii) For each NO_X sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (% O_2). The sample shall be taken simultaneously with, and at the same point as, the NO_X sample.
 - (iii) The NO_X emission rate shall be computed for each pair of NO_X and O_2 samples. The NO_X emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples.

[40 CFR 60.46(b)(1), (2), (3), (4), & (5)]

- **D.19.** The owner or operator may use the following as alternatives to the reference methods and procedures in 40 CFR 60.46 or in other sections as specified:
- (1) The emission rate (E) of particulate matter, SO_2 and NO_X may be determined by using the Fc factor, provided that the following procedure is used:
 - (i) The emission rate (E) shall be computed using the following equation:

$$E = C F_c (100 / \% CO_2)$$

where:

E = emission rate of pollutant, ng/J (lb/million Btu).

C = concentration of pollutant, ng/dscm (lb/dscf).

% CO_2 = carbon dioxide concentration, percent dry basis.

 F_c = factor as determined in appropriate sections of Method 19.

Page 17 of 31

- (ii) If and only if the average F_c factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O_2 and CO_2 concentration according to the procedures in 40 CFR 60.46(b)(2)(ii), (4)(ii), or (5)(ii). Then if F_o (average of three runs), as calculated from the equation in Method 3B, is more than \pm 3 percent than the average F_o value, as determined from the average values of F_d and F_c in Method 19, i.e., F_{oa} =0.209 (F_{da} / F_{ca}), then the following procedure shall be followed:
 - (A) When F_o is less than 0.97 F_{oa} , then E shall be increased by that proportion under 0.97 F_{oa} , e.g., if F_o is 0.95 F_{oa} , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.
 - (B) When F_0 is less than 0.97 F_{0a} and when the average difference (\overline{d}) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{0a} , e.g., if F_0 is 0.95 F_{0a} , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
 - (C) When F_0 is greater than 1.03 F_{0a} and when \overline{d} is positive, then E shall be decreased by that proportion over 1.03 F_{0a} , e.g., if F_0 is 1.05 F_{0a} , E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
- (2) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack gas temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). Method 17 shall not be used after wet FGD systems if the effluent gas is saturated or laden with water droplets.
- (3) Particulate matter and SO₂ may be determined simultaneously with the Method 5 train provided that the following changes are made:
 - (i) The filter and impinger apparatus in sections 2.1.5 and 2.1.6 of Method 8 is used in place of the condenser (section 2.1.7) of Method 5.
 - (ii) All applicable procedures in Method 8 for the determination of SO₂ (including moisture) are used.
- (4) For Method 6, Method 6C may be used. Method 6A may also be used whenever Methods 6 and 3B data are specified to determine the SO₂ emission rate, under the conditions in 40 CFR 60.46(d)(1).
- (5) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the O_2 concentration (% O_2) for the emission rate correction factor.
- (6) For Method 3, Method 3A or 3B may be used.
- (7) For Method 3B, Method 3A may be used.
- [40 CFR 60.46(d)(1), (2), (3), (4), (5), (6), & (7)]
- **D.28.** The owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, and oxygen. [40 CFR 60.45(a) & (b)]

Page 18 of 31

- **D.29.** For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:
- (1) Methods 6, 7, and 3B, as applicable, shall be used for the performance evaluations of sulfur dioxide continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B are given in 40 CFR 60.46(d).
- (2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60.
- (3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined as follows:

[In parts per million]

Fossil fuel	Span value for	
	sulfur dioxide	
Gas	{1}	
Liquid	1,000	
Solid	1,500	
Combinations	1,000y+1,500z	

{1}Not applicable.

where:

- x = the fraction of total heat input derived from gaseous fossil fuel, and
- y = the fraction of total heat input derived from liquid fossil fuel, and
- z = the fraction of total heat input derived from solid fossil fuel.
- (4) All span values computed under 40 CFR 60.45(c)(3) for burning combinations of fossil fuels shall be rounded to the nearest 500 ppm.
- [40 CFR 60.45(c)(1), (2), (3), & (4)]

To:

- **D.11.** Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:
- (1) Opacity. Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.
- (2) <u>Sulfur dioxide</u>. Excess emissions for affected facilities are defined as:
 - (i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by fuel sampling and analysis exceed the applicable standard under 40 CFR 60.43.
- [40 CFR 60.45(b)(2) and 60.45(g)(1) & (2)]

Page 19 of 31

D.17. The owner or operator shall determine compliance with the particulate matter, and NO_X standards in 40 CFR 60.42, 60.43, and 60.44 as follows:

(1) The emission rate (E) of particulate matter, or NO_X shall be computed for each run using the following equation:

 $E = C F_d (20.9)/(20.9 - \% O_2)$

E = emission rate of pollutant, ng/J (1b/million Btu).

C = concentration of pollutant, ng/dscm (1b/dscf).

% O_2 = oxygen concentration, percent dry basis.

 F_d = factor as determined from Method 19.

- (2) Method 5 shall be used to determine the particular matter concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems.
 - (i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train may be set to provide a gas temperature no greater than 160 ± 14 °C (320 ± 25 °F).
 - (ii) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (% O_2). The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab sampling procedure is used, the O_2 concentration for the run shall be the arithmetic mean of all the individual O_2 sample concentrations at each traverse point.
 - (iii) If the particulate run has more than 12 traverse points, the O₂ traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O₂ traverse points.
- (3) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.
- (5) Method 7 shall be used to determine the NO_X concentration.
 - (i) The sampling site and location shall be the same as for the SO₂ sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.
 - (ii) For each NO_X sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (% O_2). The sample shall be taken simultaneously with, and at the same point as, the NO_X sample.
 - (iii) The NO_X emission rate shall be computed for each pair of NO_X and O_2 samples. The NO_X emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples.

[40 CFR 60.46(b)(1), (2), (3), & (5)]

- **D.19.** The owner or operator may use the following as alternatives to the reference methods and procedures in 40 CFR 60.46 or in other sections as specified:
- (1) The emission rate (E) of particulate matter, SO_2 and NO_X may be determined by using the Fc factor, provided that the following procedure is used:
 - (i) The emission rate (E) shall be computed using the following equation:

 $E = C F_c (100 / \% CO_2)$

Page 20 of 31

where:

E = emission rate of pollutant, ng/J (lb/million Btu).

C = concentration of pollutant, ng/dscm (lb/dscf).

% CO_2 = carbon dioxide concentration, percent dry basis.

 F_c = factor as determined in appropriate sections of Method 19.

- (ii) If and only if the average F_c factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O_2 and CO_2 concentration according to the procedures in 40 CFR 60.46(b)(2)(ii), (4)(ii), or (5)(ii). Then if F_o (average of three runs), as calculated from the equation in Method 3B, is more than \pm 3 percent than the average F_o value, as determined from the average values of F_d and F_c in Method 19, i.e., F_{oa} =0.209 (F_{da} / F_{ca}), then the following procedure shall be followed:
 - (A) When F_0 is less than 0.97 F_{0a} , then E shall be increased by that proportion under 0.97 F_{0a} , e.g., if F_0 is 0.95 F_{0a} , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.
 - (B) When F_0 is less than 0.97 F_{0a} and when the average difference (d) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{0a} , e.g., if F_0 is 0.95 F_{0a} , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
 - (C) When F_0 is greater than 1.03 F_{0a} and when \overline{d} is positive, then E shall be decreased by that proportion over 1.03 F_{0a} , e.g., if F_0 is 1.05 F_{0a} , E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
- (2) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack gas temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). Method 17 shall not be used after wet FGD systems if the effluent gas is saturated or laden with water droplets.
- (3) Particulate matter and SO₂ may be determined simultaneously with the Method 5 train provided that the following changes are made:
 - (i) The filter and impinger apparatus in sections 2.1.5 and 2.1.6 of Method 8 is used in place of the condenser (section 2.1.7) of Method 5.
 - (ii) All applicable procedures in Method 8 for the determination of SO₂ (including moisture) are used.
- (5) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the O_2 concentration (% O_2) for the emission rate correction factor.
- (6) For Method 3, Method 3A or 3B may be used.
- (7) For Method 3B, Method 3A may be used.

[40 CFR 60.46(d)(1), (2), (3), (5), (6), & (7)]

Page 21 of 31

D.28. The owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions. [40 CFR 60.45(a)]

- **D.29.** For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:
- (3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent. [40 CFR 60.45(c)(3)]

Delete Specific Conditions:

D.30. and D.31.

Add New Conditions:

D.18. Compliance with the sulfur dioxide emission standard of specific condition **D.7.** shall be demonstrated using the fuel sampling and analysis procedures of specific condition **D.19.**

[Rule 62-213.440, F.A.C. and Applicant Request dated June 14, 1996]

- **D.19.** The following fuel sampling and analysis program shall be used to demonstrate compliance with the sulfur dioxide standard and as the substitute for the sulfur dioxide continuous monitoring system:
- a. Determine and record the as-fired fuel sulfur content, percent by weight, (1) for liquid fuels using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or the respective successor ASTM method(s), to analyze a representative sample of the blended fuel following each fuel delivery, (2) for gaseous fuels using ASTM D1072-90, or the respective successor ASTM method.
- b. Record daily the amount of each fuel fired, the density of each fuel, and the percent sulfur content by weight of each fuel.
- c. Utilize the information in a. and b., above, to calculate the SO_2 emission rate to ensure compliance at all times.

[Rules 62-213.440, F.A.C.]

D.31. Sulfur Dioxide. For a fossil fuel fired steam generator that does not use a flue gas desulfurization device, a continuous monitoring system for measuring sulfur dioxide emissions is not required if the owner or operator monitors sulfur dioxide emissions by fuel sampling and analysis under 40 CFR 60.45(d). The applicant has elected to utilize fuel sampling and analysis in lieu of a continuous monitoring system for sulfur dioxide. See specific condition **D.19**.

[40 CFR 60.45(b)(2)]

As a result of the deletions and additions, specific conditions were renumbered, as appropriate.

Page 22 of 31

15. R: Specific condition D.25. sets the requirements for compliance testing of liquid fuel burning emissions units which operate less than 400 hours. No further clarification will be made.

16. R: In response to the comment, a new appendix containing provisions from 40 CFR 60, Subpart A, and new specific conditions D.37. and E.38. will be added and specific conditions citing individual portions of 40 CFR 60, Subpart A, will be deleted, as follows:

Add:

D.37. The permittee shall comply with the requirements contained in Appendix 40 CFR 60, Subpart A, attached to this permit. [Rule 62-204.800(7)(d), F.A.C.]

E.38. The permittee shall comply with the requirements contained in Appendix 40 CFR 60, Subpart A, attached to this permit. [Rule 62-204.800(7)(d), F.A.C.]

Delete Specific Conditions:

D.37., D.38., E.38., and E.39.

- 17. R: The Department included inappropriate references to Rule 62-296.405, F.A.C., in several specific conditions for emissions units -005 and -006. These references will be eliminated. The Department notes that the inclusion of Rule 62-296.405, F.A.C., by the applicant as an applicable requirement is incorrect and will not be subject to the permit shield. The language of 40 CFR 60.7 is included in Appendix 40 CFR 60, Subpart A. See response 16. R:, above.
- 18. R: See response 17. R:, above. Four specific conditions are only applicable to existing emissions units, D.6., D.13., E.6., and E.14., will be deleted and specific conditions affected by these changes will be renumbered.
- 19. R: The Department agrees with the comment and the following conditions will be added:

Add New Conditions

E.10. A flue gas desulfurization system will be installed to treat exhaust gases and will operate such that whenever coal or blends of coal and petroleum coke or refuse are burned, sulfur dioxide gases discharged to the atmosphere from the boiler shall not exceed 10 percent of the potential combustion concentration (90 percent reduction), or 35 percent of the potential combustion concentration (65 percent reduction), when emissions are less than 0.75 pound per million Btu heat input. Compliance with the percent reduction requirement shall be determined on a 30-day rolling average. This compliance information shall be retained for a period of five years and made available by the City upon request of the Department. Whenever blends of petroleum coke with other fuels are co-fired, sulfur dioxide emissions shall not exceed 0.718 pound per million Btu heat input based on a 30-day rolling average and shall comply with the reduction requirements given above.

[PSD-FL-008(B) and Rule 62-213.440, F.A.C.]

Page 23 of 31

E.11. The burning of high sulfur oil (greater than 0.5 percent sulfur by weight) or a combination of high sulfur oil and municipal refuse as an emergency fuel without the use of the SO₂ scrubber will be allowed only when the flue gas desulfurization system malfunctions to the extent that the burning of coal would cause emission limitations to be exceeded. Sulfur dioxide emitted to the atmosphere from the boiler shall not exceed 0.8 pound per million Btu heat input under this condition.

[PSD-FL-008(B)]

E.12. During malfunctions of equipment which cause an interruption of the coal feed to the boiler, the burning of high sulfur oil (greater than 0.5 percent sulfur by weight) or a combination of high sulfur oil and municipal refuse will be allowed only if all flue gases are fully scrubbed by the SO₂ scrubber. Sulfur dioxide emitted to the atmosphere from the boiler shall not exceed 0.8 pound per million Btu heat input under this condition.

[PSD-FL-008(B)]

E.13. Continuous burning of natural gas, low sulfur fuel oil (less than or equal to 0.5 percent sulfur by weight), or combinations of these two fuels with or without the use of the SO₂ scrubber will be allowed.

[PSD-FL-008(B)]

As a result of these additions, original specific conditions E.10. through E.15. will be renumbered.

E.19. In addition to the requirements of 40 CFR 60.7, each excess emissions report shall include the periods of oil consumption due to flue gas desulfurization system malfunction. [PSD-FL-008]

As a result of this addition, original specific conditions E.16. through E.33. will be renumbered.

E.38. Continuous monitors shall be installed and operated in accordance with 40 CFR 60.45 and 60.13. In addition, an ASTM-certified automatic solid fossil fuel sampler shall be installed which produces a representative daily sample for analysis of sulfur, moisture, heating value and ash. The solid fossil fuel data shall be used in conjunction with emissions factors and the continuous monitoring data to calculate SO₂ reduction.

[PSD-FL-008(B)]

As a result of this addition, original specific conditions E.34. through E.38. will be renumbered.

E.44. The City shall maintain and submit to the Department on an annual basis for a period of five years from the date that the unit is initially co-fired with petroleum coke, information demonstration in accordance with 40 CFR 52.21(b)(33) and 40 CFR 52.21(b)(21)(v) that the operational changes did not result in emissions increases of carbon monoxide, nitrogen oxides, or sulfuric acid mist.

[PSD-FL-008(B)]

Page 24 of 31

20. R: The Department acknowledges the comment and will mark facility wide condition 2. as not federally enforceable.

- 21. R: The Department has not received an amendment to the initial Title V permit requesting this change. The condition will remain as noticed.
- 22. R: The Department will change Facility-Wide Condition 8. in accordance with your request. As a result of this comment, Facility-Wide Condition 8. is changed, as follows:

From:

8. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: maintenance of paved areas; regular mowing of grass and care of vegetation; limiting access to plant property by unnecessary vehicles; application of water to paved and unpaved roads and open stockpiles where active handling occurs; removal of dust from roads to limit particulate re-entrainment; use of vacuum trucks for ash cleaning when performing plant maintenance; and, enclosing, where practical, areas of paint removal. [Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application

received June 14, 1996]

To:

8. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: maintenance of paved areas; regular mowing of grass and care of vegetation; and limiting access to plant property by unnecessary vehicles. [Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application

received June 14, 1996, as amended in a request received July 8, 1997

- 23. R: The Department has added the additional information received May 9, 1997, to the listing of supplemental information filed with the Department.
- 24. R: The Department agrees with the comment and will change Unregulated Emissions Unit and/or Activities item "CT startup diesel" to "CT startup diesel engine", will delete gallon use restrictions, and will add the coal, limestone and flyash systems.
- 25. R: The applicant included mobile sources as an exempt activity in the Title V application. Because of the permit shield, it was included in the exempt list. The reference to mobile sources will be deleted from the exempt list.
- 26. R: Specific conditions D.5. and D.10. are quotes of the rule and the Department does not wish to modify them. Specific condition D.29. has been deleted as the result of a previous comment.
- 27. R: The Department acknowledges the comment and will make the appropriate changes to Table 2-1 consistent with the changes addressed in this document.
- 28. R: The Department acknowledges the comment and will make the appropriate changes to Table 1-1 consistent with the changes addressed in this document.

Page 25 of 31

29. R: All conditions which have not been marked Not Federally Enforceable are federal requirements or have been approved by the EPA as part of Florida's SIP or in a federally delegated program, i.e., Title V. The conditions will remain as noticed. The fact that Lakeland does not "acquiesce that any of the conditions are federally enforceable" is moot.

- **B.** Letter from Ms Farzie Shelton Dated August 6, 1997, and received on August 7, 1997, containing follow-up comments.
- 1.R: The Department agrees with the comment and as a result of the comment specific condition D.3. will be changed as follows:

From:

D.3. Methods of Operation. Fuels. The only fuels allowed to be burned are natural gas, propane, No. 6 Fuel Oil, No. 2 Fuel Oil and combinations of natural gas, No. 6 Fuel Oil and/or No. 2 Fuel Oil.

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

To:

D.3. Methods of Operation. Fuels. The only fuels allowed to be burned are natural gas, propane, No. 6 Fuel Oil, No. 2 Fuel Oil and combinations of natural gas, propane, No. 6 Fuel Oil and/or No. 2 Fuel Oil.

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

2.R: The Department has received updated segment pages for Emissions Unit -001. As a result of the comment, specific condition A.3. is changed as follows:

From:

A.3. Methods of Operation. Fuels. The only fuels allowed to be burned are natural gas, propane, No. 6 Fuel Oil, On-Specification Used Oil and combinations of natural gas, propane, No. 6 Fuel Oil and/or On-Specification Used Oil. On-Specification used oil containing any quantifiable levels of PCBs can only be fired when the emissions unit is at normal operating temperatures.

[Rule 62-213.410, F.A.C.; and, 40 CFR 271.20(e)(3)]

To:

1.7

A.3. Methods of Operation. Fuels. The only fuels allowed to be burned are natural gas, propane, No. 6 Fuel Oil, On-Specification Used Oil, No. 2 Fuel Oil and combinations of natural gas, propane, No. 6 Fuel Oil, No. 2 Fuel Oil and/or On-Specification Used Oil. On-Specification used oil containing any quantifiable levels of PCBs can only be fired when the emissions unit is at normal operating temperatures.

[Rule 62-213.410, F.A.C.; and, 40 CFR 271.20(e)(3)]

Page 26 of 31

3.R: The Department requires the information afforded by analyses to provide the "reasonable assurance" that the oils meet the minimum requirements for on-specification used oil and to determine the presence of PCBs. The condition will remain as written.

4.R: The Department agrees with the comment and will add new specific condition **B.16.** and will renumber the remaining conditions.

Add New Condition:

- **B.16.** By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year. [Rule 62-297.310(7)(a)4., F.A.C.]
- **5.R:** The fuel consumption rates were the only design capacity restrictions for these emissions units in their respective operation permits. As a result of a previous comment, the Department added heat inputs to the specific conditions for these emissions units. The Department has historically relied on these fuel consumption limits as "reasonable assurance" and will not remove them from the specific conditions **B.1.** and **C.1.**.
- **6.R:** The Department agrees with the comment and specific condition **D.10**. will be changed as follows:

From:

- **D.10.** Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:
- (1) <u>Opacity</u>. Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.
- (2) Sulfur dioxide. Excess emissions for affected facilities are defined as:
 - (i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by fuel sampling and analysis exceed the applicable standard under 40 CFR 60.43.

[40 CFR 60.45(b)(2) and 60.45(g)(1) & (2)]

To:

- **D.10.** Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:
- (1) <u>Opacity</u>. Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.

[40 CFR 60.45(b)(2) and 60.45(g)(1)]

Page 27 of 31

7.R: The Department does not agree that emissions unit -005 is similar to the Larsen boilers and emissions unit -001 at this facility. Emissions unit -005 is subject to the provisions of 40 CFR 60, Subpart D whereas the other units are subject to Rule 62-296.405, F.A.C. The Department cannot alter the requirements of 40 CFR 60, Subpart D which allows a fossil fuel fired steam generator without a flue gas desulfurization device to use fuel sampling and analysis in place of a sulfur dioxide continuous emissions monitor. The City of Lakeland stated that they were not subject to the sulfur dioxide continuous monitor requirement of the subpart. This requires them to show continuous compliance through fuel sampling and analysis. The condition will remain as written.

- **8.R:** In the situation where multiple fuels are fired during the year, the annual compliance test will be performed on the fuel or combination of fuels which are reasonably expected to produce the highest emissions, in accordance with the subpart. The Department acknowledges the comment.
- **9.R:** The Department acknowledges the comment. The "appendix" contains applicable excerpts from 40 CFR 60, Subpart A.
- **10.R:** The Department acknowledges the comment. Rule 62-296.405(2), F.A.C., adopts 40 CFR 60, Subparts D and Da by reference. The applicable regulations to which each emissions unit is subject are referenced in a permitting note following the description of the emissions unit.
- 11.R: The Department agrees with the comment and will change specific conditions D.11. and E.16. as follows:

From:

- **D.11.** Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.16.** Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.]

Page 28 of 31

To:

- **D.11.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) 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.16.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) 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.]
- 12.R: The Department has received the change to the original submittal to minimize fugitive emissions. As a result of this submittal, Facility-Wide Condition 7. is changes as follows:

From:

7. 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 devices or systems deemed necessary and ordered by the Department. Containers shall be kept closed and stored in weather-tight buildings.

[Rule 62-296.320(1)(a), F.A.C.; Proposed by applicant in the initial Title V permit application received June 14, 1996]

To:

7. 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. Containers shall be kept closed.

[Rule 62-296.320(1)(a), F.A.C.; Proposed by applicant in the initial Title V permit application received June 14, 1996; Revised by a letter received August 7, 1997]

- 13.R: The Department acknowledges the comment.
- 14.R: The Department is addressing the issue of "exemptions" through rule-making. When rule-making becomes final, adjustments will be made when and as appropriate.
- **15.R:** Facility-Wide Condition 8. is in addition to Condition 58 in TV-1. Since the meeting, it has been determined that Condition 58 in TV-1 is SIP approved.

Page 29 of 31

16.R: Since CEMs are not used to show compliance for emissions unit -005, these rules are not applicable. The averaging period for using CEMs data has been recognized as the averaging period of the applicable EPA test method if the period has not been specified by rule. No changes will be made.

- C. The Department received some comments from Region 4, U.S. EPA, via the fax on August 7, 1997, regarding another PROPOSED permit (1050003-004-AV). In a teleconference call on the 8th, resolution was achieved on all of the issues, which included the following agreed to changes to all permits:
- 1. The citing of Rule 62-297.310(7)(a)10., F.A.C., will be deleted since no emissions units are exempt from permitting at a Title V source and the condition is only a statement referring the reader back to Rule 62-210.300(3)(a), F.A.C., which states the same.
- 2. In Rule 62-297.310(7)(b), F.A.C., 4th line, the word "shall" was changed to "may" because of what has been approved in the SIP. The citing will also contain the qualifier "SIP approved".
- 3. The addresses and appropriate particulars were added for the Department's District office and the U.S. EPA, Region 4 office in Section II. Facility-wide Conditions.
- 4. In Appendix TV-1:
- a. Condition No. 11 has been flagged as "Not federally enforceable."
- b. Condition No. 55 was deleted due to duplicity with condition No. 17; and, the subsequent conditions have been renumbered.
- c. Condition No. 54 has been flagged as "Not federally enforceable."
- d. Condition No. 56 (now No. 55) has been edited and the citing has a flag of "(Chapter 62-281, F.A.C., is not federally enforceable)".
- e. Condition No. 57 (now No. 56) has been flagged as "Not federally enforceable until SIP approved."
- 5. In Section II. Facility-wide conditions., condition No. 9 was created to define the effective date of the permit as day one for any reporting, monitoring, or recording requirements that are time-based.
- 6. Acid Rain Part: the following new conditions have been added to the part:
- a. (<u>new</u>) A.3. <u>Emission Allowances</u>. 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 increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(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.]

Page 30 of 31

b. (<u>new</u>) A.4. <u>Statement of Compliance</u>. 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. 51., Appendix TV-1, Title V Conditions.} [Rule 62-214.420(11), F.A.C.]

In addition to the above, the following changes have been made for clarity:

- 1. In Section II. Facility-wide Conditions., the EPA compliance test method (**Method 9**) is stated as the method of compliance and the appropriate rule citing was added [Rule 62-296.320(4)(b)1. & 4., F.A.C.].
- 2. Due to the above changes made to Appendix TV-1, the version will carry the date of "08/11/97".
- **D.** 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".
- 3. Since the issuance of the PROPOSED permit was delayed by extensions of time to file for hearing past the first of the year, the following dates are changed, as follows:

From: Effective Date: January 1, 1998

Renewal Application Due Date: July 5, 2002

Expiration Date: December 31, 2002

Page 31 of 31

To:

Effective Date: January 1, 1999

Renewal Application Due Date: July 5, 2003

Expiration Date: December 31, 2003

E. Documents on file with the permitting authority:

- -Letter received July 2, 1997 from Ms. Farzie Shelton.
- -Letter received July 8, 1997 from Ms. Farzie Shelton.
- -Letter received August 7, 1997 from Ms. Farzie Shelton.
- -Letter received September 4, 1997 from Ms. Farzie Shelton.

III. Conclusion.

The permitting authority hereby issues the PROPOSED Permit No.: 1050004-003-AV, with any changes noted above.

Appendix U-1, List of Unregulated Emissions Unit's and/or Activities.

Lakeland Electric & Water Utilities FINAL Permit No.: 1050004-003-AV

C. D. McIntosh, Jr. Power Plant Facility ID No.: 1050004

<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'.

<u>E.U.</u>	
ID No.	Brief Description of Emissions Units and/or Activity
-007	Tanks with greater than 10,000 gallon capacity installed prior to July 23, 1984
-008	Diesel drive coal tunnel sump engine
-009	Fire water UPS diesel No. 31
-010	Fire water UPS diesel No. 32
-011	CT startup diesel
-012	General purpose diesel engines
-013	Emergency generators
-014	General purpose painting
-015	Parts Cleaning
-016	Sand Blasting (Maintenance only)
-017	Wastewater Treatment Tank
-018	Three Cooling Towers (Unit 2 and 3)
-019	Northside Waste Water Treatment Facility - Wastewater treatment processes and
	tanks
-020	Northside Waste Water Treatment Facility - Two emergency diesel generators
-021	Northside Waste Water Treatment Facility - Chemical and petroleum storage
-022	Northside Waste Water Treatment Facility - Miscellaneous activities
-023	Coal processing and conveying system
-024	Coal storage system
-025	Coal transfer and loading system
-026	Limestone handling and storage system
-027	Flyash handling and storage system

[electronic file name: 1050004u.doc]

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

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

FINAL Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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. Diesel Storage Tank (T-021)
- 2. Heavy Oil Tank (T-113)
- 3. Heavy Oil Tank (T-114)
- 4. Heavy Oil Tank (T-115)
- 5. Used Oil Tank (T-116)
- 6. Comfort Heating <1 MMBtu/hr
- 7. Non-Industrial Vacuum Cleaning
- 8. Refrigeration Units
- 9. Vacuum Pumps for Labs
- 10. Steam Cleaning Equipment
- 11. Sanders <5 square feet
- 12. Space Heating Equipment; non-boilers
- 13. Bakery Ovens
- 14. Lab Equipment
- 15. Brazing, Soldering, or Welding
- 16. Laundry Dryers
- 17. Fire and Safety Equipment
- 18. Surface Coating <5% VOC

[electronic file name: 1050004g.doc]

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97)

[Note: This attachment includes "canned conditions" developed from the "Title V Core List."]

{Permitting note: APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}

Chapter 62-4, F.A.C.

1. Not federally enforceable. General Prohibition. Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the Department, unless the source is exempted by Department rule. The Department may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the provisions of Chapter 403, F.S., or the rules promulgated thereunder. A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit.

[Rule 62-4.030, Florida Administrative Code (F.A.C.); Section 403.087, Florida Statute (F.S.)]

- 2. Not federally enforceable. Procedure to Obtain Permits: Application.
- (1) Any person desiring to obtain a permit from the Department shall apply on forms prescribed by the Department and shall submit such additional information as the Department by law may require.
- (2) All applications and supporting documents shall be filed in quadruplicate with the Department.
- (3) To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. 'All applications for a Department permit shall be certified by a professional engineer registered in the State of Florida except when the application is for renewal of an air pollution operation permit at a minor facility as defined in Rule 62-210.200, F.A.C., or where professional engineering is not required by Chapter 471, F.S. Where required by Chapter 471 or 492, F.S., applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.
- (4) Processing fees for air construction permits shall be in accordance with Rule 62-4.050(4), F.A.C.
- (5)(a) To be considered by the Department, each application must be accompanied by the proper processing fee. The fee shall be paid by check, payable to the Department of Environmental Protection. The fee is non-refundable except as provided in Section 120.60, F.S., and in this section.
 - (c) Upon receipt of the proper application fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin.
 - (d) If the applicant does not submit the required fee within ten days of receipt of written notification, the Department shall either return the unprocessed application or arrange with the applicant for the pick up of the application.
 - (e) If an applicant submits an application fee in excess of the required fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin upon receipt, and the Department shall refund to the applicant the amount received in excess of the required fee.
- (6) Any substantial modification to a complete application shall require an additional processing fee determined pursuant to the schedule set forth in Rule 62-4.050, F.A.C., and shall restart the time requirements of Sections 120.60 and 403.0876, F.S. For purposes of this Subsection, the term "substantial modification" shall mean a modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review.
- (7) Modifications to existing permits proposed by the permittee which require substantial changes in the existing permit or require substantial evaluation by the Department of potential impacts of the proposed modifications shall require the same fee as a new application.

[Rule 62-4.050, F.A.C.]

3. <u>Standards for Issuing or Denying Permits</u>. Except as provided at Rule 62-213.460, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules. [Rule 62-4.070(7), F.A.C.]

Modification of Permit Conditions.

- (1) For good cause and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions and on application of the permittee the Department may grant additional time. For the purpose of this section, good cause shall include, but not be limited to, any of the following:
 - (a) A showing that an improvement in effluent or emission quality or quantity can be accomplished because of technological advances without unreasonable hardship.
 - (b) A showing that a higher degree of treatment is necessary to effect the intent and purpose of Chapter 403, F.S.
 - (c) A showing of any change in the environment or surrounding conditions that requires a modification to conform to applicable air or water quality standards.
 - (e) Adoption or revision of Florida Statutes, rules, or standards which require the modification of a permit condition for compliance.
- (2) A permittee may request a modification of a permit by applying to the Department.
- (3) A permittee may request that a permit be extended as a modification of the permit. Such a request must be submitted to the Department in writing before the expiration of the permit. Upon timely submittal of a request for extension, unless the permit automatically expires by statute or rule, the permit will remain in effect until final agency action is taken on the request. For construction permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that, upon completion, the extended permit will comply with the standards and conditions required by applicable regulation. For all other permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that the extended permit will comply with the standards and conditions applicable to the original permit. A permit for which the permit application fee was prorated in accordance with Rule 62-4.050(4)(1), F.A.C., shall not be extended. In no event shall a permit be extended or remain in effect longer than the time limits established by statute or rule.

[Rule 62-4.080, F.A.C.]

5. Renewals. Prior to one hundred eighty (180) days before the expiration of a permit issued pursuant to Chapter 62-213, F.A.C., the permittee shall apply for a renewal of a permit using forms incorporated by reference in the specific rule chapter for that kind of permit. A renewal application shall be timely and sufficient. If the application is submitted prior to 180 days before expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department or, if there is court review of the Department's final agency action, until a later date is required by Section 120.60, F.S., provided that, for renewal of a permit issued pursuant to Chapter 62-213, F.A.C., the applicant complies with the requirements of Rules 62-213.420(1)(b)3. and 4., F.A.C.

[Rule 62-4.090(1), F.A.C.]

6. Suspension and Revocation.

- (1) Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.
- (2) Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.
- (3) A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or the permit holder's agent:
 - (a) Submitted false or inaccurate information in application or operational reports.
 - (b) Has violated law, Department orders, rules or permit conditions.
 - (c) Has failed to submit operational reports or other information required by Department rules.
 - (d) Has refused lawful inspection under Section 403.091, F.S.

[Rule 62-4.100, F.A.C.]

7. Not federally enforceable. Financial Responsibility. The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules. [Rule 62-4.110, F.A.C.]

8. Transfer of Permits.

- (1) Within 30 days after the sale or legal transfer of a permitted facility, an "Application for Transfer of Permit" (DEP Form 62-1.201(1)) must be submitted to the Department. This form must be completed with the notarized signatures of both the permittee and the proposed new permittee.
- (2) The Department shall approve the transfer of a permit unless it determines that the proposed new permittee cannot provide reasonable assurances that conditions of the permit will be met. The determination shall be limited solely to the ability of the new permittee to comply with the conditions of the existing permit, and it shall not concern the adequacy of these permit conditions. If the Department proposes to deny the transfer, it shall provide both the permittee and the proposed new permittee a written objection to such transfer together with notice of a right to request a Chapter 120, F.S., proceeding on such determination.
- (3) Within 30 days of receiving a properly completed Application for Transfer of Permit form, the Department shall issue a final determination. The Department may toll the time for making a determination on the transfer by notifying both the permittee and the proposed new permittee that additional information is required to adequately review the transfer request. Such notification shall be served within 30 days of receipt of an Application for Transfer of Permit form, completed pursuant to Rule 62-4.120(1), F.A.C. If the Department fails to take action to approve or deny the transfer within 30 days of receipt of the completed Application for Transfer of Permit form, or within 30 days of receipt of the last item of timely requested additional information, the transfer shall be deemed approved.
- (4) The permittee is encouraged to apply for a permit transfer prior to the sale or legal transfer of a permitted facility. However, the transfer shall not be effective prior to the sale or legal transfer.
- (5) Until this transfer is approved by the Department, the permittee and any other person constructing, operating, or maintaining the permitted facility shall be liable for compliance with the terms of the permit. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility.

[Rule 62-4.120, F.A.C.]

- 9. <u>Plant Operation-Problems</u>. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. [Rule 62-4.130, F.A.C.]
- 10. For purposes of notification to the Department pursuant to Rule 62-4.130, F.A.C., Plant Operation-Problems, "immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays.

[40 CFR 70.6(a)(3)(iii)(B)]

11. **Not federally enforceable.** Review. Failure to request a hearing within 14 days of receipt of notice of proposed or final agency action on a permit application or as otherwise required in Chapter 62-103, F.A.C., shall be deemed a waiver of the right to an administrative hearing.

[Rule 62-4.150, F.A.C.]

- 12. Permit Conditions. All permits issued by the Department shall include the following general conditions:
- (1) The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- (2) This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- (3) As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

- (4) This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- (5) This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.
- (6) The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- (7) The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (a) Have access to and copy any records that must be kept under conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
 - (c) Sample or monitor any substances or parameters at any location reasonable necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
- (8) If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (a) A description of and cause of noncompliance; and,
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
- (9) In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- (10) The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.
- (11) This permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- (12) This permit or a copy thereof shall be kept at the work site of the permitted activity.
- (14) The permittee shall comply with the following:
 - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used; and,
 - 6. the results of such analyses.
- (15) When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly. [Rules 62-4.160 and 62-213.440(1)(b), F.A.C.]

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

13. Construction Permits.

- (1) No person shall construct any installation or facility which will reasonably be expected to be a source of air or water pollution without first applying for and receiving a construction permit from the Department unless exempted by statute or Department rule. In addition to the requirements of Chapter 62-4, F.A.C., applicants for a Department Construction Permit shall submit the following as applicable:
 - (a) A completed application on forms furnished by the Department.
 - (b) An engineering report covering:
 - 1. plant description and operations,
 - 2. types and quantities of all waste material to be generated whether liquid, gaseous or solid,
 - 3. proposed waste control facilities,
 - 4. the treatment objectives,
 - 5. the design criteria on which the control facilities are based, and,
 - 6. other information deemed relevant.

Design criteria submitted pursuant to Rule 62-4.210(1)(b)5., F.A.C., shall be based on the results of laboratory and pilot-plant scale studies whenever such studies are warranted. The design efficiencies of the proposed waste treatment facilities and the quantities and types of pollutants in the treated effluents or emissions shall be indicated. Work of this nature shall be subject to the requirements of Chapter 471, F.S. Where confidential records are involved, certain information may be kept confidential pursuant to Section 403.111, F.S.

- (c) The owners' written guarantee to meet the design criteria as accepted by the Department and to abide by Chapter 403, F.S. and the rules of the Department as to the quantities and types of materials to be discharged from the installation. The owner may be required to post an appropriate bond or other equivalent evidence of financial responsibility to guarantee compliance with such conditions in instances where the owner's financial resources are inadequate or proposed control facilities are experimental in nature.
- (2) The construction permit may contain conditions and an expiration date as determined by the Secretary or the Secretary's designee.
- (3) When the Department issues a permit to construct, the permittee shall be allowed a period of time, specified in the permit, to construct, and to operate and test to determine compliance with Chapter 403, F.S., and the rules of the Department and, where applicable, to apply for and receive an operation permit. The Department may require tests and evaluations of the treatment facilities by the permittee at his/her expense.

 [Rule 62-4.210, F.A.C.]
- 14. Not federally enforceable. Operation Permit for New Sources. To properly apply for an operation permit for new sources, the applicant shall submit certification that construction was completed noting any deviations from the conditions in the construction permit and test results where appropriate.

 [Rule 62-4.220, F.A.C.]

Chapter 62-103, F.A.C.

- 15. <u>Public Notice, Public Participation, and Proposed Agency Action.</u> The permittee shall comply with all of the requirements for public notice, public participation, and proposed agency action pursuant to Rule 62-103.150 and Rule 62-210.350, F.A.C. [Rules 62-103.150, 62-210.350 and 62-213.430(1)(b), F.A.C.]
- 16. Administrative Hearing. The permittee shall comply with all of the requirements for a petition for administrative hearing or waiver of right to administrative proceeding pursuant to Rule 61-103.155, F.A.C.
 [Rule 62-103.155, F.A.C.]

Chapter 62-204, F.A.C.

17. <u>Asbestos.</u> This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source.

[40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

Chapter 62-210. F.A.C.

- 18. Permits Required. The owner or operator of any emissions unit which emits or can reasonably be expected to emit any air pollutant shall obtain an appropriate permit from the Department prior to beginning construction, modification, or initial or continued operation of the emissions unit unless exempted pursuant to Department rule or statute. All emissions limitations, controls, and other requirements imposed by such permits shall be at least as stringent as any applicable limitations and requirements contained in or enforceable under the State Implementation Plan (SIP) or that are otherwise federally enforceable. Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law.
- (1) <u>Air Construction Permits</u>. An air construction permit shall be obtained by the owner or operator of any proposed new or modified facility or emissions unit prior to the beginning of construction or modification, in accordance with all applicable provisions of Chapters 62-210, 62-212 and 62-4, F.A.C. The construction permit shall be issued for a period of time sufficient to allow construction or modification of the facility or emissions unit and operation while the new or modified facility or emissions unit is conducting tests or otherwise demonstrating initial compliance with the conditions of the construction permit.
- (2) Air Operation Permits. Upon expiration of the air operation permit for any existing facility or emissions unit, subsequent to construction or modification and demonstration of initial compliance with the conditions of the construction permit for any new or modified facility or emissions unit, or as otherwise provided in Chapter 62-210 or Chapter 62-213, the owner or operator of such facility or emissions unit shall obtain a renewal air operation permit, an initial air operation permit, or an administrative correction or revision of an existing air operation permit, whichever is appropriate, in accordance with all applicable provisions of Chapter 62-210, Chapter 62-213, and Chapter 62-4, F.A.C.
 - (a) Minimum Requirements for All Air Operation Permits. At a minimum, a permit issued pursuant to this subsection shall:
 - 1. Specify the manner, nature, volume and frequency of the emissions permitted, and the applicable emission limiting standards or performance standards, if any;
 - 2. Require proper operation and maintenance of any pollution control equipment by qualified personnel, where applicable in accordance with the provisions of any operation and maintenance plan required by the air pollution rules of the Department.
 - 3. Contain an effective date stated in the permit which shall not be earlier than the date final action is taken on the application and be issued for a period, beginning on the effective date, as provided below.
 - a. The operation permit for an emissions unit which is in compliance with all applicable rules and in operational condition, and which the owner or operator intends to continue operating, shall be issued or renewed for a five-year period, except that, for Title V sources subject to Rule 62-213.420(1)(a)1., F.A.C., operation permits shall be extended until 60 days after the due date for submittal of the facility's Title V permit application as specified in Rule 62-213.420(1)(a)1., F.A.C.
 - b. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for six months or more prior to the expiration date of the current operation permit, shall be renewed for a period not to exceed five years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided:
 - (i) the owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and,
 - (ii) the owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and,
 - (iii) the emissions unit was operating in compliance with all applicable rules as of the time the source was shut down
 - c. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for five years or more prior to the expiration date of the current operation permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided the conditions given in Rule 62-210.300(2)(a)3.b., F.A.C., are met and the owner or operator demonstrates to the Department that failure to renew the permit would constitute a hardship, which may include economic hardship.

- d. The operation permit for an electric utility generating unit on cold standby or long-term reserve shutdown shall be renewed for a five-year period, and additional five-year periods, even if the unit is not maintained in operational condition, provided the conditions given in Rules 62-210.300(2)(a)3.b.(i) through (iii), F.A.C., are met.
- 4. In the case of an emissions unit permitted pursuant to Rules 62-210.300(2)(a)3.b., c., and d., F.A.C., include reasonable notification and compliance testing requirements for reactivation of such emissions unit and provide that the owner or operator demonstrate to the Department prior to reactivation that such reactivation would not constitute reconstruction pursuant to Rule 62-204.800(7), F.A.C.

[Rules 62-210.300(1) & (2), F.A.C.]

- 19. Not federally enforceable. <u>Notification of Startup</u>. The owner or operator of any emissions unit or facility which has a valid air operation permit and which has been shut down more than one (1) year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of sixty (60) days prior to the intended startup date.
 - (a) The notification shall include the planned startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.
 - (b) If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.

[Rule 62-210.300(5), F.A.C.]

20. Emissions Unit Reclassification.

- (a) Any emissions unit whose operation permit has been revoked as provided for in Chapter 62-4, F.A.C., shall be deemed permanently shut down for purposes of Rule 62-212.500, F.A.C. Any emissions unit whose permit to operate has expired without timely renewal or transfer may be deemed permanently shut down, provided, however, that no such emissions unit shall be deemed permanently shut down if, within 20 days after receipt of written notice from the Department, the emissions unit owner or operator demonstrates that the permit expiration resulted from inadvertent failure to comply with the requirements of Rule 62-4.090, F.A.C., and that the owner or operator intends to continue the emissions unit in operation, and either submits an application for an air operation permit or complies with permit transfer requirements, if applicable.
- (b) If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit. [Rule 62-210.300(6), F.A.C.]

21. Public Notice and Comment.

- (1) Public Notice of Proposed Agency Action.
 - (a) Notwithstanding any discretionary public notice requirements contained in Rule 62-103.150(2)(a), F.A.C., a notice of proposed agency action on permit application, where the proposed agency action is to issue the permit, shall be published by any applicant for:
 - I. An air construction permit;
 - 2. An air operation permit, permit renewal or permit revision subject to Rule 62-210.300(2)(b), F.A.C., (i.e., a FESOP), except as provided in Rule 62-210.300(2)(b)1.b., F.A.C.; or
 - 3. An air operation permit, permit renewal, or permit revision subject to Chapter 62-213, F.A.C., except those permit revisions meeting the requirements of Rule 62-213.412(1), F.A.C.
 - (b) The notice required by Rule 62-210.350(1)(a), F.A.C., shall be published in accordance with all otherwise applicable provisions of Rule 62-103.150, F.A.C.
- (2) Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.
 - (a) Before taking final agency action on a construction permit application for any proposed new or modified facility or emissions unit subject to the preconstruction review requirements of Rule 62-212.400 or 62-212.500, F.A.C., the Department shall comply with all applicable provisions of Rule 62-103.150, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:
 - I. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S., and the Department's analysis of the effect of the proposed construction or modification on ambient air quality, including the Department's preliminary determination of whether the permit should be approved or disapproved;
 - 2. A 30-day period for submittal of public comments; and,

- 3. A notice, by advertisement in a newspaper of general circulation in the county affected, specifying the nature and location of the proposed facility or emissions unit, whether BACT or LAER has been determined, the degree of PSD increment consumption expected, if applicable, and the location of the information specified in paragraph 1. above; and notifying the public of the opportunity for submitting comments and requesting a public hearing.
- (b) The notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-103.150, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.
- (c) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall also be sent by the Department to the Regional Office of the U. S. Environmental Protection Agency and to all other state and local officials or agencies having cognizance over the location of such new or modified facility or emissions unit, including local air pollution control agencies, chief executives of city or county government, regional land use planning agencies, and any other state, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the new or modified facility or emissions unit.
- (d) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be displayed in the appropriate district, branch and local program offices.
- (e) An opportunity for public hearing shall be provided in accordance with Chapter 120, F.S., and Rule 62-103.150, F.A.C.
- (f) Any public comments received shall be made available for public inspection in the location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., is available and shall be considered by the Department in making a final determination to approve or deny the permit.
- (g) The final determination shall be made available for public inspection at the same location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., was made available.
- (h) For a proposed new or modified emissions unit which would be located within 100 kilometers of any Federal Class I area or whose emissions may affect any Federal Class I area, and which would be subject to the preconstruction review requirements of Rule 62-212.400, F.A.C., or Rule 62-212.500, F.A.C.:
 - 1. The Department shall mail or transmit to the Administrator a copy of the initial application for an air construction permit and notice of every action related to the consideration of the permit application.
 - 2. The Department shall mail or transmit to the Federal Land Manager of each affected Class I area a copy of any written notice of intent to apply for an air construction permit; the initial application for an air construction permit, including all required analyses and demonstrations; any subsequently submitted information related to the application; the preliminary determination and notice of proposed agency action on the permit application; and any petition for an administrative hearing regarding the application or the Department's proposed action. Each such document shall be mailed or transmitted to the Federal Land Manager within fourteen (14) days after its receipt by the Department.
- (3) Additional Public Notice Requirements for Facilities Subject to Operation Permits for Title V Sources.
 - (a) Before taking final agency action to issue a new, renewed, or revised air operation permit subject to Chapter 62-213, F.A.C., the Department shall comply with all applicable provisions of Rule 62-103.150, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:
 - 1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S.; and,
 - 2. A 30-day period for submittal of public comments.
 - (b) The notice provided for in Rule 62-210.350(3)(a), F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-103.150, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.
 - (c) The notice shall identify:
 - 1. The facility;
 - 2. The name and address of the office at which processing of the permit occurs;
 - 3. The activity or activities involved in the permit action;
 - 4. The emissions change involved in any permit revision;
 - 5. The name, address, and telephone number of a Department representative from whom interested persons may obtain additional information, including copies of the permit draft, the application, and all relevant supporting materials, including any permit application, compliance plan, permit, monitoring report, and compliance statement required pursuant to Chapter 62-213, F.A.C. (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), and all other materials available to the Department that are relevant to the permit decision;
 - 6. A brief description of the comment procedures required by Rules 62-103.150 and 62-210.350(3), F.A.C.;
 - 7. The time and place of any hearing that may be held, including a statement of procedure to request a hearing (unless a hearing has already been scheduled); and,

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

8. The procedures by which persons may petition the Administrator to object to the issuance of the proposed permit after expiration of the Administrator's 45-day review period.

[Rule 62-210.350, F.A.C.]

22. Administrative Permit Corrections.

- (1) A facility owner shall notify the Department by letter of minor corrections to information contained in a permit. Such notifications shall include:
 - (a) Typographical errors noted in the permit;
 - (b) Name, address or phone number change from that in the permit;
 - (c) Any other similar minor administrative change at the source; and,
 - (d) A change requiring more frequent monitoring or reporting by the permittee.
 - (e) Changes listed at 40 CFR 72.83(a)(1), (2), (6), (9) and (10), hereby adopted and incorporated by reference, to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-76510;
 - (f) Changes listed at 40 CFR 72.83(a)(11), hereby adopted and incorporated by reference, to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-76510, provided the notification is accompanied by a copy of any EPA determination concerning the similarity of the change to those listed at Rule 17-210.360(1)(e).
- (2) Upon receipt of such notifications the Department shall within 60 days correct the permit and provide a corrected copy to the owner.
- (3) For facilities subject to Chapter 62-213, F.A.C., a copy shall be provided to EPA and any approved local air program in the county where the facility or any part of the facility is located.
- (4) The Department shall incorporate requirements resulting from issuance of new or revised construction permits into existing operation permits issued pursuant to Chapter 62-213, F.A.C., if the construction permit revisions incorporate requirements of federally enforceable preconstruction review and if the applicant requests at the time of application that all of the requirements of Rule 62-213.430(1), F.A.C., be complied with in conjunction with the processing of the construction permit application. [Rule 62-210.360, F.A.C.]

23. Reports.

- (3) Annual Operating Report for Air Pollutant Emitting Facility.
 - (a) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year.
 - (c) The annual operating report shall be submitted to the appropriate Department District or Department approved local air pollution control program office by March 1 of the following year unless otherwise indicated by permit condition or Department request.

[Rule 62-210.370(3), F.A.C.]

- 24. <u>Circumvention</u>. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]
- 25. Forms and Instructions. The forms used by the Department in the stationary source control program are adopted and incorporated by reference in this section. The forms are listed by rule number, which is also the form number, with the subject, title and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.
- (1) Application for Air Permit Long Form, Form and Instructions.
 - (a) Acid Rain Part (Phase II), Form and Instructions.
 - I. Repowering Extension Plan, Form and Instructions.
 - 2. New Unit Exemption, Form and Instructions.
 - 3. Retired Unit Exemption, Form and Instructions.
 - (b) Reserved.
- (5) Annual Operating Report (AOR) for Air Pollutant Emitting Facility, Form and Instructions. [Rule 62-210.900, F.A.C.]

Chapter 62-213, F.A.C.

26. <u>Annual Emissions Fee.</u> Each Title V source permitted to operate in Florida must pay between January 15 and March 1 of each year, upon written notice from the Department, an annual emissions fee in accordance with Rule 62-213.205, F.A.C., and the appropriate form and associated instructions.

[Rules 62-213.205 and 62-213.900(1), F.A.C.]

- 27. <u>Annual Emissions Fee.</u> Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C. [Rule 62-213.205(1)(g), F.A.C.]
- 28. Annual Emissions Fee. Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five (5) years and shall be made available to the Department upon request.

 [Rule 62-213.205(1)(j), F.A.C.]
- 29. <u>Annual Emissions Fee</u>. DEP Form 62-213.900(1), F.A.C., "Major Air Pollution Source Annual Emissions Fee Form", must be completed by the permittee and submitted with the annual emissions fee. [Rule 62-213.205(4), F.A.C.]
- 30. <u>Air Operation Permit Fees</u>. After December 31, 1992, no permit application processing fee, renewal fee, modification fee or amendment fee is required for an operation permit for a Title V source. [Rule 62-213.205(5), F.A.C.]
- 31. <u>Permits and Permit Revisions Required</u>. All Title V sources are subject to the permit requirements of Chapter 62-213, F.A.C. [Rule 62-213.400, F.A.C.]
- 32. No Title V source may operate except in compliance with Chapter 62-213, F.A.C. [Rule 62-213.400(1), F.A.C.]
- 33. <u>Changes Without Permit Revision</u>. Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation in each alternative method of operation:
- (1) Permitted sources may change among those alternative methods of operation allowed by the source's permit as provided by the terms of the permit;
- (2) Permitted sources may implement the terms or conditions of a new or revised construction permit if;
 - (a) The application for construction permit complied with the requirements of Rule 62-213.420(3) and (4), F.A.C.;
 - (b) The terms or conditions were subject to federally enforceable preconstruction review pursuant to Chapter 62-212, F.A.C.; and,
 - (c) The new or revised construction permit was issued after the Department and the applicant complied with all the requirements of Rule 62-213.430(1), F.A.C.;
- (3) A permitted source may implement operating changes after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;
 - (a) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change;
 - (b) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;
- (4) Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C. [Rule 62-213.410, F.A.C.]

34. Immediate Implementation Pending Revision Process.

- (1) Those permitted Title V sources making any change that constitutes a modification pursuant to paragraph (a) of the definition of modification at Rule 62-210.200, F.A.C., but which would not constitute a modification pursuant to paragraph (b) of the same definition, may implement such change prior to final issuance of a permit revision in accordance with Rule 62-213.412, F.A.C., provided the change:
 - (a) Does not violate any applicable requirement;
 - (b) Does not contravene any permit term or condition for monitoring, testing, recordkeeping or reporting, or any compliance certification requirement;
 - (c) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapter 62-212 or 62-296, F.A.C.;
 - (d) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject including any federally enforceable emissions cap or federally enforceable alternative emissions limit.
- (2) A Title V source may immediately implement such changes after they have been incorporated into the terms and conditions of a new or revised construction permit issued pursuant to Chapter 62-212, F.A.C., and after the source provides to EPA, the Department, each affected state and any approved local air program having geographic jurisdiction over the source, a copy of the source's application for operation permit revision. The Title V source may conform its application for construction permit to include all information required by Rule 62-213.420, F.A.C., in lieu of submitting separate application forms.
- (3) The Department shall process the application for operation permit revision in accordance with the provisions of Chapter 62-213, F.A.C., except that the Department shall issue a draft permit revision or a determination to deny the revision within 60 days of receipt of a complete application for operation permit revision or, if the Title V source has submitted a construction permit application conforming to the requirements of Rule 62-213.420, F.A.C., the Department shall issue a draft permit or a determination to deny the revision at the same time the Department issues its determination on issuance or denial of the construction permit application. The Department shall not take final action until all the requirements of Rule 62-213.430(1)(a), (c), (d), and (e), F.A.C., have been complied with.
- (4) Pending final action on the operation permit revision application, the source shall implement the changes in accordance with the terms and conditions of the source's new or revised construction permit.
- (5) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes until after the Department takes final action to issue the operation permit revision.
- (6) If the Department denies the source's application for operation permit revision, the source shall cease implementation of the proposed changes.

[Rule 62-213.412, F.A.C.]

35. Permit Applications.

- (1) Duty to Apply. For each Title V source, the owner or operator shall submit a timely and complete permit application in compliance with the requirements of Rules 62-213.420, 62-4.050(1) & (2), and 62-210.900, F.A.C.
 - (a) Timely Application.
 - 3. For purposes of permit renewal, a timely application is one that is submitted in accordance with Rule 62-4.090, F.A.C.
 - (b) Complete Application.
 - 1. Any applicant for a Title V permit, permit revision or permit renewal must submit an application on DEP Form No. 62-210.900(1), which must include all the information specified by Rule 62-213.420(3), F.A.C., except that an application for permit revision must contain only that information related to the proposed change. The applicant shall include information concerning fugitive emissions and stack emissions in the application. Each application for permit, permit revision or permit renewal shall be certified by a responsible official in accordance with Rule 62-213.420(4), F.A.C.
 - 2. For those applicants submitting initial permit applications pursuant to Rule 62-213.420(1)(a)1., F.A.C., a complete application shall be an application that substantially addresses all the information required by the application form number 62-210.900(1), and such applications shall be deemed complete within sixty days of receipt of a signed and certified application unless the Department notifies the applicant of incompleteness within that time. For all other applicants, the applications shall be deemed complete sixty days after receipt, unless the Department, within sixty days after receipt of a signed application for permit, permit revision or permit renewal, requests additional documentation or information needed to process the application. An applicant making timely and complete application for permit, or timely application for permit renewal as described by Rule 62-4.090(1), F.A.C., shall continue to operate the source

under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, provided the applicant complies with all the provisions of Rules 62-213.420(1)(b)3. and 4. F.A.C. Failure of the Department to request additional information within sixty days of receipt of a properly signed application shall not impair the Department's ability to request additional information pursuant to Rules 62-213.420(1)(b)3. and 4., F.A.C. 3. For those permit applications submitted pursuant to the provisions of Rule 62-213.420(1)(a)1., F.A.C., the Department shall notify the applicant if the Department becomes aware at any time during processing of the application that the application contains incorrect or incomplete information. The applicant shall submit the corrected or supplementary information to the Department within ninety days unless the applicant has requested and been granted additional time to submit the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days or such additional time as requested and granted shall render the application incomplete. 4. For all applications other than those addressed at Rule 62-213.420(1)(b)3., F.A.C., should the Department become aware, during processing of any application that the application contains incorrect information, or should the Department become aware, as a result of comment from an affected State, an approved local air program, EPA, or the public that additional information is needed to evaluate the application, the Department shall notify the applicant within 30 days. When an applicant becomes aware that an application contains incorrect or incomplete information, the applicant shall submit the corrected or supplementary information to the Department. If the Department notifies an applicant that corrected or supplementary information is necessary to process the permit, and requests a response, the applicant shall provide the information to the Department within ninety days of the Department request unless the applicant has requested and been granted additional time to submit the information or, the applicant shall, within ninety days, submit a written request that the Department process the application without the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days, or such additional time as requested and granted, or to demand in writing within ninety days that the application be processed without the information shall render the application incomplete. Nothing in this section shall limit any other remedies available to the Department.

[Rules 62-213.420(1)(a)3. and 62-213.420(1)(b)1., 2., 3. & 4., F.A.C.]

- 36. <u>Confidential Information</u>. Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA. [Rule 62-213.420(2), F.A.C.]
- 37. Standard Application Form and Required Information. Applications shall be submitted under Chapter 62-213, F.A.C., on forms provided by the Department and adopted by reference in Rule 62-210.900(1), F.A.C. The information as described in Rule 62-210.900(1), F.A.C., shall be included for the Title V source and each emissions unit. An application must include information sufficient to determine all applicable requirements for the Title V source and each emissions unit and to evaluate a fee amount pursuant to Rule 62-213.205, F.A.C. [Rule 62-213.420(3), F.A.C.]
- 38. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[Rule 62-213.420(4), F.A.C.]

- 39. a. <u>Permit Renewal and Expiration</u>. Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) and 62-213.420(3), F.A.C. Unless a Title V source submits a timely application for permit renewal in accordance with the requirements of Rule 62-4.090(1), F.A.C., the existing permit shall expire and the source's right to operate shall terminate.
 - b. <u>Permit Revision Procedures.</u> Permit revisions shall meet all requirements of Chapter 62-213, F.A.C., including those for content of applications, public participation, review by approved local programs and affected states, and review by EPA, as they apply to permit issuance and renewal, except that permit revisions for those activities implemented pursuant to Rule 62-213.412, F.A.C., need not meet the requirements of Rule 62-213.430(1)(b), F.A.C. The Department shall require permit revision in accordance with the provisions of Rule 62-4.080, F.A.C., and 40 CFR 70.7(f), whenever any source becomes

subject to any condition listed at 40 CFR 70.7(f)(1), hereby adopted and incorporated by reference. The below requirements from 40 CFR 70.7(f) are adopted and incorporated by reference in Rule 62-213.430(4), F.A.C.:

- o 40 CFR 70.7(f): Reopening for Cause.
- (1) This section contains provisions from 40 CFR 70.7(f) that specify the conditions under which a Title V permit shall be reopened prior to the expiration of the permit. A Title V permit shall be reopened and revised under any of the following circumstances:
 - (i) Additional applicable requirements under the Act become applicable to a major Part 70 source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii).
 - (ii) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approved by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - (iii) The permitting authority or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - (iv) The Administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (2) Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
- (3) Reopenings under 40 CFR 70.7(f)(1) shall not be initiated before a notice of such intent is provided to the Part 70 source by the permitting authority at least 30 days in advance of the date that the permit is to be reopened, except that the permitting authority may provide a shorter time period in the case of an emergency.

[Rules 62-213.430(3) & (4), F.A.C.; and, 40 CFR 70.7(f)]

- 40. Insignificant Emissions Units or Pollutant-Emitting Activities.
 - (a) All requests for determination of insignificant emissions units or activities made pursuant to Rule 62-213.420(3)(m), F.A.C., shall be processed in conjunction with the permit, permit renewal or permit revision application submitted pursuant to Chapter 62-213, F.A.C. Insignificant emissions units or activities shall be approved by the Department consistent with the provisions of Rule 62-4.040(1)(b), F.A.C. Emissions units or activities which are added to a Title V source after issuance of a permit under Chapter 62-213, F.A.C., shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify as insignificant pursuant to Rule 62-213.430(6), F.A.C.
 - (b) An emissions unit or activity shall be considered insignificant if:
 - 1. Such unit or activity would be subject to no unit-specific applicable requirement;
 - 2. Such unit or activity, in combination with other units or activities proposed as insignificant, would not cause the facility to exceed any major source threshold(s) as defined in Rule 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s); and
 - 3. Such unit or activity would not emit or have the potential to emit:
 - a. 500 pounds per year or more of lead and lead compounds expressed as lead;
 - b. 1,000 pounds per year or more of any hazardous air pollutant;
 - c. 2,500 pounds per year or more of total hazardous air pollutants; or
 - d. 5.0 tons per year or more of any other regulated pollutant.

[Rule 62-213.430(6), F.A.C.]

- 41. <u>Permit Duration</u>. Operation permits for Title V sources may not be extended as provided in Rule 62-4.080(3), F.A.C., if such extension will result in a permit term greater than five (5) years. [Rule 62-213.440(1)(a), F.A.C.]
- 42. <u>Monitoring Information</u>. All records of monitoring information shall specify the date, place, and time of sampling or measurement and the operating conditions at the time of sampling or measurement, the date(s) analyses were performed, the company or entity that performed the analyses, the analytical techniques or methods used, and the results of such analyses. [Rule 62-213.440(1)(b)2.a., F.A.C.]

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

43. <u>Retention of Records.</u> Retention of records of all monitoring data and support information shall be for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

[Rule 62-213.440(1)(b)2.b., F.A.C.]

- 44. <u>Monitoring Reports</u>. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports. [Rule 62-213.440(1)(b)3.a., F.A.C.]
- 45. <u>Deviation from Permit Requirements Reports</u>. The permittee shall report in accordance with the requirements of Rules 62-210.700(6) and 62-4.130, F.A.C., any deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.

[Rule 62-213.440(1)(b)3.b., F.A.C.]

- 46. Reports. All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4), F.A.C. [Rule 62-213.440(1)(b)3.c, F.A.C.]
- 47. If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect. [Rule 62-213.440(1)(d)1., F.A.C.]
- 48. It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity.

 [Rule 62-213.440(1)(d)3., F.A.C.]
- 49. A Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C. [Rule 62-213.440(1)(d)4., F.A.C.]
- 50. A situation arising from sudden and unforeseeable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference.

 [Rule 62-213.440(1)(d)5., F.A.C.]
- 51. <u>Confidentiality Claims.</u> Any permittee may claim confidentiality of any data or other information by complying with Rule 62-213.420(2), F.A.C.

[Rule 62-213.440(1)(d)6., F.A.C.]

52. Statement of Compliance. The permittee shall submit a statement of compliance with all terms and conditions of the permit. Such statement shall be submitted to the Department and EPA annually, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement. The statement of compliance shall include the identity of each term or condition of the permit for which each unit has remained in compliance during the period covered by the statement. The statement shall include identification of all methods used to demonstrate compliance and identification of each term or condition of the permit for which any unit has not remained in compliance during the period covered by the statement. For each term or condition for which the source has not remained in compliance during the period covered by the statement, the statement shall also identify each unit not in compliance and each term and condition with which the unit was not in compliance and state the inclusive dates that the source was not in compliance, the actions taken to achieve compliance and the method used to demonstrate compliance. Such statement shall be accompanied by a certification by a responsible official, in accordance with Rule 62-213.420(4), F.A.C. [Rule 62-213.440(3), F.A.C.]

- 53. Permit Shield. Except as provided in Chapter 62-213, F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall be deemed compliance with any applicable requirements in effect as of the date of permit issuance, provided that the source included such applicable requirements in the permit application. Nothing in Rule 62-213.460, F.A.C., or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program.

 [Rule 62-213.460, F.A.C.]
- 54. Forms and Instructions. The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The form is listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or by contacting the appropriate permitting authority.
- (1) Major Air Pollution Source Annual Emissions Fee (AEF) Form. [Rule 62-213.900(1), F.A.C.]

Chapter 62-256. F.A.C.

55. Not federally enforceable. Open Burning. This permit does not authorize any open burning nor does it constitute any waiver of the requirements of Chapter 62-256, F.A.C. Source shall comply with Chapter 62-256, F.A.C., for any open burning at the source.

[Chapter 62-256, F.A.C.]

Chapter 62-281, F.A.C.

- 56. <u>Refrigerant Requirements</u>. Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Rule 62-281.100, F.A.C. Those requirements include the following restrictions:
- (1) Any facility having any refrigeration equipment normally containing 50 (fifty) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added pursuant to 40 CFR 82.166;
- (2) No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided at 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved pursuant to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
- (3) No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or Class II substance at 40 CFR 82, Subpart A, Appendices A and B, except in compliance with Rule 62-281.100, F.A.C., and 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;
- (4) No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or Class II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined at 40 CFR 82.152) for service, maintenance or repair unless the person has been properly trained and certified pursuant to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance pursuant to 40 CFR 82.158 and unless the person observes the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
- (5) No person may dispose of appliances (except small appliances, as defined at 40 CFR 82.152) without using equipment certified for that type of appliance pursuant to 40 CFR 82.158 and without observing the practices set forth at 40 CFR 82.156 and 40 CFR 82.166:
- (6) No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined at 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82, Subpart F.

[40 CFR 82; and, Chapter 62-281, F.A.C. (Chapter 62-281, F.A.C., is not federally enforceable)]

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

Chapter 62-296, F.A.C.

- 57. Not federally enforceable until SIP approved. <u>Industrial. Commercial.</u> and <u>Municipal Open Burning Prohibited</u>. Open burning in connection with industrial, commercial, or municipal operations is prohibited, except when:
 - (a) Open burning is determined by the Department to be the only feasible method of operation and is authorized by an air permit issued pursuant to Chapter 62-210 or 62-213, F.A.C.; or
 - (b) An emergency exists which requires immediate action to protect human health and safety; or
 - (c) A county or municipality would use a portable air curtain incinerator to burn yard trash generated by a hurricane, tornado, fire or other disaster and the air curtain incinerator would otherwise be operated in accordance with the permitting exemption criteria of Rule 62-210.300(3), F.A.C.

[Rule 62-296.320(3), F.A.C.]

58. Unconfined Emissions of Particulate Matter.

(4)(c)1. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any emissions unit whatsoever, including, but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrially related activities such as loading, unloading, storing or handling, without taking reasonable precautions to prevent such emission.

- 3. Reasonable precautions may include, but shall not be limited to the following:
 - a. Paving and maintenance of roads, parking areas and yards.
 - b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
 - c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar emissions units.
 - d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the emissions unit to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
 - e. Landscaping or planting of vegetation.
 - f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
 - g. Confining abrasive blasting where possible.
 - h. Enclosure or covering of conveyor systems.
- 4. In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

[Rules 62-296.320(4)(c)1., 3., & 4. F.A.C.]

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APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

Stack Sampling Facilities Provided by the Owner of an Emissions Unit. This section describes the minimum requirements for stack sampling facilities that are necessary to sample point emissions units. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. Emissions units must provide these facilities at their expense. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

(a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis,

shall install and maintain permanent stack sampling facilities.

(b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches.

2. The ports shall be capable of being sealed when not in use.

3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter upstream from any fan, bend, constriction or other flow disturbance.

- 4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
- 5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d) Work Platforms.

- 1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
- 2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.

3. On circular stacks with more than two sampling ports, the work platform shall

extend 360 degrees around the stack.

- 4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.
- (e) Access to Work Platform.

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96) (continued)

- 1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.
- 2. Walkways over free-fall areas shall be equipped with safety rails and toeboards. (f) Electrical Power.
- 1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.
- 2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

 (g) Sampling Equipment Support.
- 1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.
- a. The bracket shall be a standard 3 inch x 3 inch x one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
- b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
- c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
- 2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.
- 3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test. [Rule 62-297.310(6), F.A.C.]

TABLE 297.310-1 CALIBRATION SCHEDULE (version dated 10/07/96)

[Note: This table is referenced in Rule 62-297.310, F.A.C.]

[Note: This table is referenced in Rule 62-297.310, F.A.C.]					
ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE		
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%		
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F		
Thermocouple	Annually	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer	5 degrees F		
Barometer	Monthly	Hg barometer or NOAA station	+/-1% scale		
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3		
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between readings .004"		
Dry Gas Meter and Orifice Meter	1. Full Scale: When received, When 5% change observed, Annually 2. One Point: Semiannually	Spirometer or calibrated wet test or dry gas test meter	2%		
	3. Check after each test series	Comparison check	5%		

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FIGURE 1--SUMMARY REPORT--GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE (version dated 7/96)

Pollutant (Circle One): SO ₂ NO ₈ TRS H ₂ S CO Opacity Reporting period dates: From	[Note: This form is referenced in 40 CFR 60.7, Subpart A-General Provisions	s]
Company: Emission Limitation: Address: Monitor Manufacturer: Model No.: Date of Latest CMS Certification or Audit: Process Unit(s) Description: Total source operating time in reporting period ¹ : Emission data summary ¹ 1. Duration of excess emissions in reporting period due to: a. Startup/shutdown b. Control equipment problems c. Process problems d. Other known causes e. Unknown causes 2. Total duration of excess emissions x (100) / [Total source operating time] 3. Total duration of excess emissions x (100) / [Total source operating time] Total duration of excess emissions x (100) / [Total source operating time] Total duration of excess emissions x (100) / [Total source operating time] Total duration of excess emissions x (100) / [Total source operating time] Left Company (100) / [Total source operating time] Total cMS Downtime x (100) / [Total source operating time] Total duration of excess emissions x (100) / [Total source operating time] Note: On a separate page, describe any changes since last quarter in CMS, process or controls. I certify that the information contained in this report is true, accurate, and complete. Name: Signature:	Pollutant (Circle One): SO ₂ NO _X TRS H ₂ S	CO Opacity
Emission Limitation: Address: Monitor Manufacturer: Model No.: Date of Latest CMS Certification or Audit: Process Unit(s) Description: Total source operating time in reporting period ¹: Emission data summary ¹ 1. Duration of excess emissions in reporting period due to: a. Startup/shutdown b. Control equipment problems c. Process problems d. Other known causes e. Unknown causes e. Unknown causes 2. Total duration of excess emissions 3. Total duration of excess emissions x (100) / [Total source operating time] 1. For opacity, record all times in minutes. For gases, record all times in hours. 2. For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total opera	Reporting period dates: From	to
Address:	Company:	
Address:	Emission Limitation:	
Model No.: Date of Latest CMS Certification or Audit: Process Unit(s) Description: Total source operating time in reporting period ¹: Emission data summary ¹ 1. Duration of excess emissions in reporting period due to: a. Startup/shutdown		
Model No.: Date of Latest CMS Certification or Audit: Process Unit(s) Description: Total source operating time in reporting period ¹: Emission data summary ¹ 1. Duration of excess emissions in reporting period due to: a. Startup/shutdown	Monitor Manufacturer:	
Date of Latest CMS Certification or Audit: Process Unit(s) Description: Total source operating time in reporting period ¹: Emission data summary ¹ 1. Duration of excess emissions in reporting period due to: a. Startup/shutdown		
Emission data summary CMS performance summary		
Emission data summary CMS performance summary 1. Duration of excess emissions in reporting period due to: a. Startup/shutdown	Process Unit(s) Description:	
Emission data summary CMS performance summary 1. Duration of excess emissions in reporting period due to: a. Startup/shutdown		<u> </u>
1. Duration of excess emissions in reporting period due to: a. Startup/shutdown	Emission data summary 1	CMS performance summary
For opacity, record all times in minutes. For gases, record all times in nours. For the reporting period: If the total duration of excess emissions is 1 percent or greater of the total operating time or the total CMS downtime is 5 percent or greater of the total operating time, both the summary report form and the excess emission report described in 40 CFR 60.7(c) shall be submitted. Note: On a separate page, describe any changes since last quarter in CMS, process or controls. I certify that the information contained in this report is true, accurate, and complete. Name:	a. Startup/shutdown	a. Monitor equipment malfunctions
I certify that the information contained in this report is true, accurate, and complete. Name:	For opacity, record all times in minutes. For gases, record from the reporting period: If the total duration of excess e the total CMS downtime is 5 percent or greater of the total control of the to	missions is 1 percent or greater of the total operating time or tal operating time, both the summary report form and the
Name:	Note: On a separate page, describe any changes since last que	arter in CMS, process or controls.
Signature: Date:	I <u>certify</u> that the information contained in this report is true, ac	curate, and complete.
	Name:	
Title:	Signature:	Date:
	Title:	

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Phase II Permit Application

Page 1

For more information, see instructions and refer to 40 CFR 72.30 and 72.31 and Chapter 62-21s, F.A.C.

This submission is: 🛛 New

☐Revised

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

C.D. McIntosh, Jr.,	FL,	6 76		

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

Compliance Plan				
a	b	c	d	e
Boiler ID#	Unit Will Hold Allow- ances in Accordance	Repowering Plan	New Units	New Units
	with 40 CFR 72.9(c)(1)		Commence Operation Date	Monitor Certification Deadline

1	Yes	No		
2	Yes	No		
3	Yes	No		
	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.

Plant Name (from Step 1) C.D. McIntosh, Jr.

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

and date

Standard Requirements

Permit Requirements.

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall: (i) Submit a complete Acid Rain part application (including a compliance plan) under 40 CFR part 72, 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 permit;
 - The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:
- (i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain part issued by the 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 Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, and Rule 62-214,420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
 (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the provious calendar was from the unit and previous calendar year from the unit; and
- (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.

 (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1)(i) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain 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

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

- Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the 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,

Plant Name (from Step 1) C.D. McIntosh, Jr.

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

Certification

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

Name Timothy C. Bates, Plant Manager	
Signature Simily C Batic.	Date 12/14/95

Phase II Permit-Page 4

STEP 5 (optional) Enter the source AIRS and FINDS identification numbers, if known

AIRS			
FINDS			

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:	
Florida Electric Power Coordinating Group, Inc.,	ASP No. 97-B-01
Petitioner.	a Marie and and and a series of

ORDER ON REQUEST FOR ALTERNATE PROCEDURES AND REQUIREMENTS

Pursuant to Rule 62-297.620, Florida Administrative Code (F.A.C.), the Florida Electric Coordinating Group, Incorporated, (FCG) petitioned for approval to: (1) Exempt fossil fuel steam generators which burn liquid and/or solid fuel for less than 400 hours during the federal fiscal year from the requirement to conduct an annual particulate matter compliance test; and, (2) Exempt fossil fuel steam generators which burn liquid and/or solid fuel for less than 400 hours during the federal fiscal year from the requirement to conduct an annual particulate matter compliance test during the year prior to renewal of an operation permit. This Order is intended to clarify particulate testing requirements for those fossil fuel steam generators which primarily burn gaseous fuels including, but not necessarily limited to natural gas.

Having considered the provisions of Rule 62-296.405(1), F.A.C., Ruie 62-297.310(7), F.A.C., and all supporting documentation, the following Findings of Fact, Conclusions of Law, and Order are entered:

FINDINGS OF FACT

- 1. The Florida Electric Power Coordinating Group, Incorporated, petitioned the Department to exempt those fossil fuel steam generators which have a heat input of more than 250 million Btu per hour and burn solid and/or liquid fuel less than 400 hours during the year from the requirement to conduct an annual particulate matter compliance test. [Exhibit 1]
- 2. Rule 62-296.405(1)(a), F.A.C., applies to those fossil fuel steam generators that are not subject to the federal standards of performance for new stationary sources (NSPS) in 40 CFR 60 and which have a heat input of more than 250 million Btu per hour.
- 3. Rule 62-296.405(1)(a), F.A.C., limits visible emissions from affected fossil fuel steam generators to, "20 percent opacity except for either one six-minute period per hour during which

not exceed 40 percent. The option selected shall be specified in the emissions unit's construction and operation permits. Emissions units governed by this visible emission limit shall test for particulate emission compliance annually and as otherwise required by Rule 62-297, F.A.C."

- 4. Rule 62-296.405(1)(a), F.A.C., further states, "Emissions units electing to test for particulate matter emission compliance quarterly shall be allowed visible emissions of 40 percent opacity. The results of such tests shall be submitted to the Department. Upon demonstration that the particulate standard has been regularly complied with, the Secretary, upon petition by the applicant, shall reduce the frequency of particulate testing to no less than once annually.
- 5. Rule 297.310(7)(a)1., F.A.C., states, "The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit."
- 6. Rule 297.310(7)(a)3., F.A.C., states, "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.
- 7. Rule 297.310(7)(a)3., F.A.C., further states, "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 and/or solid fuel for a total of no more than 400 hours."
- 8. Rule 297.310(7)(a)4., F.A.C., states, "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 ε emental lead; 30 tons per year or more of any other regulated air pollutant..."
- 9. Rule 297.319(7)(a)5., F.A.C., states, "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."
- 10. Rul: 297.310(7)(a)6., F.A.C., states, "For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be

required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup."

- 11. Rule 297.310(7)(a)7., F.A.C., states, "For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup." [Note: The reference should be to Rule 62-296.405(1)(a), F.A.C., rather than Rule 62-296.405(2)(a), F.A.C.]
- 12. The fifth edition of the U. S. Environmental Protection Agency's Compilation of Air Pollutant Emission Factors, AP-42, that emissions of filterable particulate from gas-fired fossil fuel steam generators with a heat input of more than about 10 million Btu per hour may be expected to range from 0.001 to 0.006 pound per million Btu. [Exhibit 2]
- 13. Rule 62-296.405(1)(b), F.A.C. and the federal standards of performance for new stationary sources in 40 CFR 60.42, Subpart D, limit particulate emissions from uncontrolled fossil fuel fired steam generators with a heat input of more than 250 million Btu to 0.1 pound per million Btu.

CONCLUSIONS OF LAW

- 1. The Department has jurisdiction to consider the matter pursuant to Section 403.061, Florida Statutes (F.S.), and Rule 62-297.620, F.A.C.
- 2. Pursuant to Rule 62-297.310(7), F.A.C., the Department may require Petitioner to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.
- 3. There is reason to believe that a fossil fuel steam generator which does not burn liquid and/or solid fuel (other than during startup) for a total of more than 400 hours in a federal fiscal year and complies with all other applicable limits and permit conditions is in compliance with the applicable particulate mass emission limiting standard.

ORDER

Having considered the requirements of Rule 62-296.405, F.A.C., Rule 62-297.310, F.A.C., and supporting documentation, it is hereby ordered that:

1. 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;

- 2. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup;
- 3. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(1)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup;
- 4. 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 particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.
- 5. Pursuant to Rule 62-297.310(7), F.A.C., owners of affected fossil fuel steam generators may be required to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.
- 6. Pursuant to Rule 62-297.310(8), F.A.C., owners of affected fossil fuel steam generators shall submit the compliance test report to the District Director of the Department district office having jurisdiction over the emissions unit and, where applicable, the Air Program Administrator of the appropriate Department-approved local air program within 45 days of completion of the test.

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, or a party requests mediation as an alternative remedy under section 120.573 before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

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 (or a request for mediation, as discussed below) 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 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 each petitioner, if any;
- (e) A statement of 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 each petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by each petitioner, stating precisely the action each petitioner wants the Department to take with respect to the Department's action or proposed action in the 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.

A person whose substantial interests are affected by the Department's proposed decision, may elect to pursue mediation by asking all parties to the proceeding to agree to such mediation and by filing with the Department a request for mediation and the written agreement of all such parties to mediate the dispute. The request and agreement must be filed in (received by) the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

A request for mediation must contain the following information:

- (a) The name, address, and telephone number of the person requesting mediation and that person's representative, if any; मुं की प्र<mark>ात्त्रकात्रक के के अध्य</mark>ेत्रक कार्यक्षित के प्राप्त के सुधि के कार्यक्रिय के अध्यक्षित्रक
 - (b) A statement of the preliminary agency action;
 - (c) A statement of the relief sought; and त्वमुद्धाः । । व ता अर्थन्तिकृत्याः । । व क्रमेतः । १४ वर्षः । १८ वर्षः । १८ वर्षः ।
- (c) Either an explanation of how the requester's substantial interests will be affected by the action or proposed action accressed in this notice of intent or a statement clearly identifying the storage petition for hearing that the requester has already filed, and incorporating it by reference.

The agreement to mediate must include the following:

- (a) The names, addresses, and telephone numbers of any persons who may attend the mèdiation:
- (b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time;
 - (c) The agreed allocation of the costs and fees associated with the mediation; tion of the costs and rees associated with the costs and rees as a cost of the costs and rees are a cost of the costs and rees as a cost of the costs and rees are a cost of the cost of
- (d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation; and the survey of the original property of the
- (e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen;
- (f) The name of each party's representative who shall have authority to settle or recommend settlement; and
 - (g) The signatures of all parties or their authorized representatives.

As provided in section 120.573 of the Florida Statutes, the timely agreement of all parties to mediate will toll the time limitations imposed by sections 120.565 and 120.57 for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such a modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under sections 120,569 and 120,57 remain available for disposition of the dispute, and the notice will

specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

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

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 the 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. Upon timely filing of a petition, this Order will not be effective until further—Order of the Department.

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, Mail Station 35, Tallahassee, Florida 32399-3000; and, by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Notice of Agency Action is filed with the Clerk of the Department.

DONE AND ORDERED this 17 day of March, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

HOWARD L. RHODES, Director

Division of Air Resources Management

Twin Towers Office Building

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

(904) 488-0114

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that a copy of the foregoing was mailed to Rich Piper, Chair, Florida Power Coordinating Group, Inc., 405 Reo Street, Suite 100, Tampa, Florida 33609-1004, on this Khanda day of March 1997.

Clerk Stamp

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

Clérk

Date

FLORIDA ELECTRIC POWER COORDINATING GROUP, INC. (FCG) 405 REO STREET, SUITE 100 . (8:3) 289-5544 . FAX (8:3) 289-5646 TAMPA, FLORIDA 33609-1004

January 28, 1997



Clair H. Fancy, P.E. Chief, Bureau of Air Regulation and the state of the stat Florida Department of Environmental Protection 2600 Blair Stone Road, MS 5505 more to the least Tallahassee, FL 32301 Tallahassee, FL 32301

RE: Comments Regarding Draft Title V Permits AIR REGULATION

The Florida Electric Power Coordinating Group, Inc. (FCG), which is made up of 36 utilities owned by investors, municipalities, and cooperatives, has been following the implementation of Title V in Florida and recently submitted comments to you on draft Title V permit conditions by letter dated December 4, 1996. As indicated in that letter, representatives from the FCG would like to meet with you and other members of your air permitting staff to discuss some significant concerns that FCG member companies have regarding conditions that may be included in Title V permits issued by your office. While we will be discussing these issues with you and your staff in greater detail at that meeting, we would like to explain some of our concerns in this letter. ak of grade of

Primarily, the FCG members are concerned that the Title V pennits may contain conditions that are much different in important respects than those conditions currently included in existing air permits. During the rulemaking workshops and seminars conducted by the Department to discuss the rules implementing the Title V permitting program, representations were made on several occasions that industry could expect to see permit conditions that were substantively similar to existing permit conditions and that primarily the format was changing. Representations were also made to industry that Title V did not impose additional substantive requirements beyond what was already required under the Department's rules. Based on the first draft Title V permit that we have reviewed, we are concerned that there may be some attempt to change the substantive requirements on existing facilities through the Title V permitting process, and we would like to discuss this with you at the meeting we have scheduled for January 30, 1997.

Federal Enforceability-The FCG has long been concerned about the designation of non-federally enforceable permit terms and conditions. We are concerned about this issue because the Department's first draft Title V permits have included language stating that all terms and conditions would become federally enforceable once the permit is issued. This approach is consistent with the Department's guidance memorandum dated September 13, 1996 (DARM-PER/V-18), but we understand that the Department may now intend to remove all references to Clair H. Fancy, P.E.
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
January 28, 1997
Page 2

the federal enforceability of permit terms and conditions. We are also concerned about this approach because a Title V permit is generally federally enforceable and, without any. designation of non-federally enforceable terms and conditions, the entire permit could be interpreted to be federally enforceable. As we stated in the December 4 letter as well as our letter dated October 11, 1996, all terms and conditions in a Title V permit do not become enforceable by the U.S. Environmental Protection Agency and citizens under the Clean Air Act simply by inclusion in a Title V permit. To make it clear which provisions in a Title V permit are not federally enforceable (which are being included because of state or local requirements only), it is very important to specifically designate those conditions as having no federally enforceable basis. Such a designation is actually required under the federal Title V rules, which provide that permitting agencies are to "specifically designate as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements." 40 CFR § 70.6(b). We would like to discuss with you our concerns about this issue and to again specifically request that when Title V. permits are issued by the Department, conditions having no federally enforceable basis clearly be identified as such.

- 2. PM Testing on Gas-The FCG understands that the Department may attempt to require annual particulate matter compliance testing while firing natural gas to determine compliance with the 0.1 lb/mmBu emission limit established under Rule 62-296.405(1)(b). F.A.C. The FCG member companies feel strongly that compliance testing for particulate matter should not be required while firing natural gas. The Department has not historically required particulate matter compliance testing while firing natural gas, it is not required under the current permits for these units, and it should not be necessary since natural gas is such a clean fuel. Typically only de minimis amounts of particulate matter would be expected from the firing of natural gas, so compliance testing would not provide meaningful information to the Department. and the expense to conduct such tests is not justified. We understand that Department representatives suggested that industry could pursue an alternative test procedure under Rule 62-297.620, F.A.C., to allow a visible emissions test to be used in lieu of a stack test for determining compliance with the particulate matter limit. While certainly a visible emissions test would be preferable over a stack test, neither of these tests should be needed to demonstrate compliance with the particulate matter limit of 0.1 lb/mmBtu while burning natural gas. The FCG strongly urges that the Department reconsider its position on this issue and clarify that compliance testing for particulate matter while firing natural gas is not required.
- 3. Excess Emissions--By letter dated December 5, 1996, the U.S. Environmental Protection Agency (EPA) submitted a letter commenting on a draft Title V permit that had been issued by the Department and indicated some concern regarding excess emission provisions included in conditions that were quoted from Rule 62-210.700, F.A.C. Because the permit conditions cited simply quote the applicable provisions of the Department's rules regarding

Clair H. Fancy, P.E.
Chief, Bureau of Air Regulation
Fiorida Department of Environmental Protection
January 28, 1997
Page 3

excess emissions and because these rules have been approved as part of Florida's State Implementation Plan, the permit conditions are appropriate to be included in the permit. We understand that the Department intends to include as applicable requirements in Title V permit conditions the provisions of Rule 62-210.700, F.A.C. If the Department receives any further adverse comments regarding the excess emissions rule under 62-210.700, F.A.C., we would appreciate your contacting us. Because this issue is so important to us, we would like to discuss it with you in greater detail at our meeting on January 30.

- Compliance Testing for Combustion Turbines-While the Department's November 22, 1995, guidance regarding the compliance testing requirements for combustion turbines clearly states that the use of heat input curves based on ambient temperatures and humidities is to be included as a permit condition only if requested by a permittee, we understand that the Department may intend to include this requirement in Title V resmits for all combustion turbines. As we are sure you recall, the FCG worked over a period of several months with the Department on the development of the guidance memorandum and it was clearly understood by FCG members that the heat input curves would not be mandated but would remain voluntary for any existing combustion turbine. It was also understood by FCG members that the requirement to conduct testing at 95 to 100 percent of capacity would be required only if the permit applicant requested the use of heat input curves. We understand that the Department may be interpreting the requirement to use heat input curves and to test at 95 to 100 percent of permitted capacity to be mandatory for all combustion turbines. We would like to clarify this with you during our meeting. Also, we would like to confirm that, regardless of whether a combustion turbine uses heat input curves or tests at 95 to 100 percent of permitted capacity, it is necessary to test at four load points and correct to ISO orio to determine compliance with the nitrogen oxides (NOx) standard under New Source Performance Francard Subpart GG under 40 CFR § 60.332 and not annually thereafter.
- 5. Test Methods-The FCG is concerned about the possibility of the Department requiring a full permit revision to authorize the use of an approved test method not specifically identified in a Title V permit, even though the Department may have separately approved the use of the particular test method for a unit (i.e., through a compliance test protocol). It is the FCG's position that language should be included in all Title V permits indicating that other test methods approved by the Department may be used. Further, a full permit revision (including public notice) should not be necessary when a test method not previously identified in the permit is approved for use by a unit. The Department's subsequent approval of test methods should simply be included in the next permit renewal cycle. The FCG understands that the Department planned to confirm this approach with the U.S. Environmental Protection Agency Region IV, and we would like to discuss this issue with you at the January 30 meeting to learn of the agency's response.

Clair H. Fancy, P.E.
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
January 28, 1997
Page 4

- 6. Quarterly Reports-The FCG understands that the Department may be interpreting the quarterly reporting requirements under Rule 62-296.405(1)(g), F.A.C., to apply regardless of whether continuous emissions monitors were required under the preceding Rule 62-296.405(1)(f), F.A.C. It is the FCG's position that quarterly reports are required under Rule 62-296.405(1)(g) only when continuous emissions monitors are required under the preceding paragraph (f). While this may not be entirely clear from the language of the rules, paragraphs (f) and (g) were originally included in a separate rule on "continuous emission monitoring requirements" where it was very clear that the requirements of paragraph (g) applies only if continuous emission monitoring was required under paragraph (f). Research indicates that Rule 17-2.710, F.A.C. (copy attached), where these provisions were originally located, was first transferred to Rule 17-297.500, F.A.C. (which later became Rule 62-297.500), later repealed in November of 1994, and ultimately replaced with what is now Rule 62-296.405(1)(f) and (g), F.A.C. To the extent that an emissions unit is not subject to Rule 62-296.405(1)(f) and is not required to install and operate continuous emissions monitors (e.g., cil- and gas-fired units), the quarterly reporting requirements of paragraph (g) should not apply.
- Trivial Activities—As you may recall, in May of 1996, the FCG submitted to the Department a list of small, de minimis emissions units and activities that it considered to be "trivial," consistent with the list developed by EPA as part of the Title V "White Paper" and incorporated by reference by the Department in its March 15. 1996, guidance memorandum (DAPM-PER/V-15-Revised). We never received a response from the Department and now understand that the Department may not have made a determination as to whether any of the emission units or activities on the list should qualify as "trivial." This is an important issue to the FCG because only "trivial" activities can be omitted from the Title V permit application and permit, and ultimately omitted from emission estimates in the annual air operation reports under Rule 62-210.370(3), F.A.C. The FCG remains hopeful that the Department will consider its request to determine that most, if not all, of the emission units and activities on the May, 1996, list to be "trivial." We would like to discuss a possible resolution of this issue with you and your staff at the January 30 meeting.
- 8. Permit Shield-The FCG continues to be concerned about the language in Conditions 5 and 20 of Appendix TV-1, Title V Conditions, which circumvents the permit shield provisions under Section 403.0872(15), Florida Statutes, and Rule 62-213.460, F.A.C. The FCG believes that these conditions should be deleted in their entirety. To the extent that the Department attempt to cavear the applicability of those conditions, the FCG believes that it is important to cite to not only the regulatory citation for the permit shield but the statutory citation as well.

Thank you again for considering the PCG's comments on the draft Title V permits. We very much appreciate the cooperation we have received from the Department throughout the

Clair H. Fancy, P.E.
Chief, Burcau of Air Regulation
Florida Department of Environmental Protection
January 28, 1997
Page 5

Title V implementation process, and we look forward to our meeting later this week. If you have any questions in the meantime, please call me at 561-625-7661.

Sincerely,

Rich Piper, Chair

FCG Air Subcommittee

Enclosures

cc: Howard L. Rhodes, DEP
John Brown, DEP
Pat Comer, DEP OGC
Scott M. Sheplak, DEP
Edward Svec, DEP
FCG Air Subcommittee
Angela Morrison, HGSS

10622

OF AIR POLLUTANT EMISSION FACTORS

VOLUME I: STATIONARY POINT AND AREA SOURCES

Office Of Air Quality Planning And Standards
Office Of Air And Radiation
U. S. Environmental Protection Agency
Research Triangle Park, NC 27711

January 1995

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1.4 Natural Gas Combustion

1.4.1 General 1.2.

Natural gas is one of the major fuels used throughout the country. It is used mainly for industrial process steam and heat production; for residential and commercial space heating; and for electric power generation. Natural gas consists of a high percentage of methane (generally above 80 percent) and varying amounts of ethane, propane, butane, and inerts (typically nitrogen, carbon dioxide, and helium). Gas processing plants are required for the recovery of liquefiable constituents and removal of hydrogen sulfide before the gas is used (see Section 5.3, Natural Gas Processing). The average gross heating value of natural gas is approximately 8900 kilocalories per standard cubic meter (1000 British thermal units per standard cubic foot), usually varying from 8000 to 9800 kcal/scm (900 to 1100 Bm/scf).

1.4.2 Emissions And Controls³⁻⁵

Even though natural gas is considered to be a relatively clean-burning fuel, some emissions can result from combustion. For example, improper operating conditions, including poor air/fuel mixing, insufficient air, etc., may cause large amounts of smoke, carbon monoxide (CO), and organic compound emissions. Moreover, because a sulfur-, ontaining mercaptan is added to natural gus to permit leak detection, small amounts of sulfur oxides will be produced in the combustion process.

Nitrogen oxides (NO₂) are the inajor pollutants of concern when burning natural gas. Nitrogen oxides emissions depend primarily on the peak temperature within the combustion chamber as well as the furnace-zone oxygen concentration, nitrogen concentration, and time of exposure at peak temperatures. Emission levels vary considerably with the type and size of combustor and with operating conditions (particularly combustion air temperature, load, and excess air level in boilers).

Currently, the two most prevalent NO₂ control techniques being applied to natural gas-fired boilers (which result in characteristic changes in emission rates) are low NO₂ burners and flue gas recirculation. Low NO₂ burners reduce NO₃ by accomplishing the combustion process in surgar. Staging partially delays the combustion process, resulting in a profer name which suppresses 1.0₃ formation. The three most common types of low NO₃ burners being applied to nature, gas-fired boilers are staged air burners, staged fiel burners, and radiant fiber burners. Nitt per oxide emission reductions of 40 to £5 percent (relative to uncontrolled emission levels) have been observed with low NO₃ burners. Other combustion staging techniques which have been applied to natural gas-fired boilers include low excess air, reduced air preheat, and staged combustion (e.g., burners-out-of-service and overfire air). The degree of staging is a key operating parameter influencing NO₃ emission rates for these systems.

In a five gas recroulation (FGR) system, a portion of the five gas is recycled from the stack to the burner windbox. Upon entering the windbox, the gas is mixed with combustion air prior to being fed to the burner. The FGR system reduces NO_x emissions by two mechanisms. The recycled five gas is made up of combustion products which act as inerts during combustion of the fuelizing mixture. This additional mass is heated in the combustion zone, thereby lowering the peak fiame temperature and reducing the amount of NO_x formed. To a lesser extent, FGR also reduced NO_x formation by lowering the oxyget concentration in the primary flame zone. The amount of flue gas recirculated is a key operating parameter influencing NO_x emission rules for these systems. Flue gas

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recirculation is normally used in combination with low NO_x burners. When used in combination, these techniques are capable of reducing uncontrolled NO_x emissions by 60 to 90 percent.

Two post-combustion technologies that may be applied to natural gas-fired boilers to reduce NO_x emissions by further amounts are selective noncatalytic reduction and selective catalytic reduction. These systems inject ammonia (or urea) into combustion flue gases to reduce inlet NO_x emission rates by 40 to 70 percent.

Although not measured, all particulate matter (PM) from natural gas combustion has been estimated to be less than 1 micrometer in size. Particulate matter is composed of filterable and condensable fractions, based on the EPA sampling method. Filterable and condensable emission rates are of the same order of magnitude for boilers; for residential furnaces, most of the PM is in the form of condensable material.

The rates of CO and trace organic emissions from boilers and furnaces depend on the efficiency of natural gas combustion. These emissions are minimized by combustion practices that promote high combustion temperatures, long residence times at those temperatures, and turbulent mixing of fuel and combustion air. In some cases, the addition of NO_x control systems such as FGR and low NO_x burners reduces combustion efficiency (due to lower combustion temperatures), resulting in higher CO and organic emissions relative to uncontrolled boilers.

Emission factors for natural gas combustion in boilers and furnaces are presented in Tables 1.4-1, 1.5-2, and 1.4-3.6 For the purposes of developing emission factors, natural gas combustors have been organized into four general categories: utility/large industrial boilers, small industrial boilers, commercial boilers, and residential furnaces. Boilers and furnaces within these categories share the same general design and operating characteristics and hence have similar emission characteristics when combusting natural gas. The primary factor used to demarcate the individual combustor categories is heat input.

Table 1.4-1 (Metric And English Units), EMISSION FACTORS FOR PARTICULATE MATTER (PM)
FROM NATURAL GAS COMBUSTION*

Combustor Type	: :	Filterable PM ^c		c ! c	ondensable PM°	i ka di sa ka di sa
(Size, 10° Dtu/hr Heat Input) (SCC) ^h		kg/106 in ³ lb/106 ft ³	RATING	kg/10 ⁶ m ³	iP\10 ₆ υ ₃	RATING
Utility/large industrial boilers (> 100) (1-01-006-01, 1-01-006-04)		16 - 80 1 - 5	В	ND	ND The ND	NΛ
Small industrial boilers (10 - 100) (1:02-006-02)		6.2	В	120	7.5	D
Commercial hoilers (0.3 - < 10) (1-03-006-03)		12 4.5	C	120	7.5	C
Residential furnaces (<0.3) (No SCC)		2.8 0.18	C	180		D A

References 9-14. All factors represent uncontrolled emissions. Units are kg of pollutant/10⁶ cubic meters natural gas fired and lb of pollutant/10⁶ cubic feet natural gas fired. Based on an average hatural gas higher heating value of 8270 kcal/m³ (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. ND = no data. NA = not applicable.

b SCC = Source Classification Code.

Filterable PM is that particulate matter collected on or prior to the filter of an EPA Method 5 (or equivalent) sampling train.

d Condensable PM is that particulate matter collected using EPA Method 202, (or equivalent). Total PM is the sum of the filterable PM and condensable PM. All PM emissions can be assumed to be less than 10 micrometers in aerodynamic equivalent diameter (PM-10).

. Table 1.4-2 (Metric And English Units). EMISSION FACTORS FOR SULFUR DIOXIDE (SO₂), NITROGEN OXIDES (NO₂), AND CARBON MONOXIDE (CO) FROM NATURAL GAS COMBUSTIONA

·				<u> </u>	<u> </u>		<u> 1</u>	
Combustor Type (Size, 10 ⁶ Btu/hr Heat Input)		SO ₂ e		NO _x	÷	1	:/ CO° /	
(SCC) ^b	. kg/10 ⁶ m ³	111/106 NZ RATINO	kg/[0 ⁶ m ³	16/106 N3	DNITAS	kg/10 ⁶ m ³	1Ρ\10 ₆ Ψ ₃	RATINO
Utility/large Industrial Boilers (>100) (1-01-006-01, 1-01-006-04)			· · · · · ·	1:			:	
Uncontrolled	9.6	0.6 · . Λ	8800 5	550 ^f	A -::	640	. 40	٨
Controlled - Low NO _x burners	9.6	0.6 Å	:1300	81,	_ D	αи	ИD	. NY
Controlled - Flue gas recirculation	9.6	0.6 · A	850	. 23t.	D	ND	ИD	ΝΛ
Small Industrial Boilers (10 - 100) (1-02-006-02)		en e		•				
Uncontrolled	9.6	0.6 Λ	. 2210	140	λ	560	35	A ·
Controlled - Low NO _x burners	9.6	6.0	1300	811	D	980	61	D .
Controlled - Flue gas recirculation	9.6	0.6 Å	. : ′ 180	→ 30	·C	590	37	С
Commercial Boilers (0.3 - <10) (1-03-006-03)								
Uncontrolled	9.6	0.6 · A	1600	100	B .	330	21.	С
Controlled - Low NO _x burners	9.6	0.6 A.	270	17	C.	425	. 27	C .
Controlled - Flue gns recirculation	9.6	0.6 Å	580	36	D	. ND 1	ИD	Νλ
Residential Furnaces (<0.3) (No SCC)					•			
Uncontrolled	9.6	0.6 A	1500	91	n	610	40	п

^a Units are kg of pollutant/10⁶ cubic meters natural gas fired and lb of pollutant/10⁶ cubic feet natural gas fired. Based on an average natural gas fired higher heating value of 8270 kcal/m³ (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. ND = no data. NA = not applicable.

b SCC = Source Classification Code.

^c Reference 7. Based on average sulfur content of natural gas, 4600 g/10⁶ Nm³ (2000 gr/10⁶ scf).

d References 10,15-19. Expressed as NO₂. For tangentially fired units, use 4400 kg/10⁶ m³ (275 lb/10⁶ ft³). At reduced loads, multiply factor by load reduction coefficient in Figure 1.4-1: Note that NO_x emissions from controlled boilers will be reduced at low load conditions.

© References 9-10,16-18,20-21.

Emission factors apply to packaged boilers only.

Table 1.4-3 (Metric And English Units). EMISSION FACTORS FOR CARBON DIOXIDE (CO₂) AND TOTAL ORGANIC COMPOUNDS (TOC) FROM NATURAL GAS COMBUSTION.

Combustor Type		. CO ₂ °			TOCd	
(Size, 10 ⁶ Btu/hr Heat Input) (SCC) ^b	kg/10 ⁶ m ³	10/106 U3	RATING	kg/10 ⁶ ni ³	Ib/10 ⁶ ჩ ³	RATING
Utility/large industrial boilers (> 100) (1-01-006-01, 1-01-006-04)	NDc	ND .	NA	28[1.7	C
Small industrial boilers (10 - 100) (1-02-006-02)	1.9 E+06	1.2 E+05		928	5.8 ^g	С
Commercial boilers (0.3 - < 10) (1-03-006-03)	1.9 E+06	1.2 E+05	С	128 ^h	8.0 ^h	С
Residential furnaces (No SCC)	2.0 E+06	1.3 E+05	D	180 ^h	11 ^h	D

All factors represent uncontrolled emissions. Units are kg of pollutant/10⁶ cubic meters and 1b of pollutant/10⁶ cubic feet. Based on an average natural gas higher heating value of 8270 kcal/m³ (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given factor by the ratio of the specified heating value to this average heating value.

NA = not applicable.

b SCC = Source Classification Code.

c References 10,22-23.

d References 9-10,18.

[°] ND = no data.

Reference 8: methane comprises 17% of organic compounds.

Reference 8: methane comprises 52% of organic compounds.

h Reference 8: mediane comprises 34% of organic compounds.

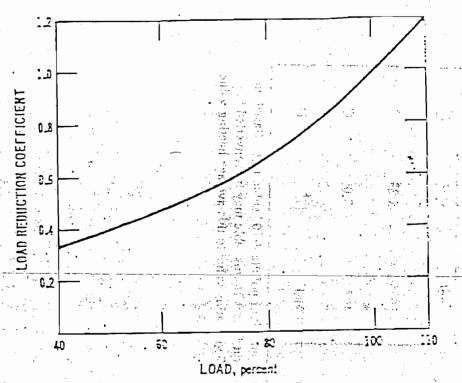


Figure 1.4-1. Load reduction coefficient as a function of boiler load. (Used to determine NO₂ reductions at reduced loads in large boilers.)

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Department of Environmental Protection

Lawton Chiles Governor Twin Towers Office Building 2600 Blair Stone Road Tallahassee. Fiorida 32399-2400

Virginia B. Wetherell Secretary

July 9, 1997

Certified Mail - Return Receipt Requested

Mr. Rich Piper, Chair Florida Power Coordinating Group, Inc. 405, Reo Street, Suite 100 Tampa, Florida 33609-1004

Dear Mr. Piper:

Enclosed is a copy of a Scrivener's Order correcting an error in the Order concerning particulate matter testing of natural gas fired boilers.

If you have any questions concerning the above, please call Yogesh Manocha at 904/488-6140, or write to me.

Sincerely,

M. D. Harley, P.E., DEE

P.E. Administrator

Emissions Monitoring Section Bureau of Air Monitoring and

Mobile Sources

MDH:ym

cc: Dotty Diltz, FDEP Pat Comer, FDEP

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:)	
Florida Electric Power Coordinating Group, Inc.,)	ASP No. 97-B-01
Petitioner.) ,	

ORDER CORRECTING SCRIVENER'S ERROR

The Order which authorizes owners of natural gas fired fossil fuel steam generators to forgo particulate matter compliance testing on an annual basis and prior to renewal of an operation permit entered on the 17th day of March, 1997, is hereby corrected on page 4, paragraph number 4, by deleting the words "pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C.":

4. In renewing an air operation permit pursuant to Rule 62 210.300(2)(e)3.b., c., or d., F.A.C., the Department shall not require submission of particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.

DONE AND ORDERED this 2 day of July, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

HOWARD L. RHODES, Director

Division of Air Resources Management

Twin Towers Office Building

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

(904) 488-0114

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that a copy of the foregoing was mailed to Rich Piper, Chair, Florida Power Coordinating Group, Inc., 405 Reo Street, Suite 100, Tampa, Florida 33609-1004, on this 10 to day of July 1997.

Clerk Stamp

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

Clerk

40 CFR 60 Subpart A-General Provisions (Version dated 07/23/97)

These conditions are based on the July 1996 CFR version.

[Applicability note: These conditions are for an NSPS emissions unit (a.k.a. "federal facility") that has been built and has conducted the initial performance test(s) in accordance with 40 CFR 60.8.]

{Note: Rule 62-204.800(d), F.A.C., did not adopt/incorporate 40 CFR 60.4, 40 CFR 60.16, and 40 CFR 60.17.}

1. <u>Definitions</u>. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee. [40 CFR 60.2; Rule 62-204.800(7)(a), F.A.C.]

40 CFR 60.7 Notification and record keeping.

- 2. The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:
- (4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

 [40 CFR 60.7(a)(4)]
- 3. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.

 [40 CFR 60.7(b)]
- 4. Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:
- (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report. [40 CFR 60.7(c)(1), (2), (3), and (4)]
- 5. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
- (1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
- (2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

'{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance} (electronic file name: figure1.doc)

[40 CFR 60.7(d)(1) and (2)]

- 6. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
- (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
- (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
- (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).
- (2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After

demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)(1)]

7. Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records.

[40 CFR 60.7(f); Rule 62-213.440(1)(b)2.b., F.A.C.]

40 CFR 60.8 Performance tests.

8. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)]

40 CFR 60.11 Compliance with standards and maintenance requirements.

- 9. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard. [40 CFR 60.11(a)]
- 10. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). [40 CFR 60.11(b)]
- 11. The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

 [40 CFR 60.11(c)]
- 12. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

 [40 CFR 60.11(d)]

13. The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of EPA Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he or she shall notify the

Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which EPA Method 9 data indicates noncompliance, the EPA Method 9 data will be used to determine opacity compliance.

[40 CFR 60.11(e)(5)]

40 CFR 60.12 Circumvention.

14. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12]

40 CFR 60.13 Monitoring requirements.

- 15. For the purposes of 40 CFR 60.13, all continuous monitoring systems (CMS) required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

 [40 CFR 60.13(a)]
- 16. If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, Appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in Appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.
- (1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 60.8 and as described in 40 CFR 60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 60.8 is conducted.

 [40 CFR 60.13(c)(1)]

- 17. (1) Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.
- (2) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

 [40 CFR 60.13(d)(1) and (2)]
- 18. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:
- (1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
- (2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

 [40 CFR 60.13(e)(1) and (2)]
- 19. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used. [40 CFR 60.13(f)]
- 20. When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems (CMS) on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

 [40 CFR 60.13(g)]
- 21. Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally

spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O₂ or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity). [40 CFR 60.13(h)]

[electronic file name: 40CFR60a.doc]

Excellence Is Our Goal, Service Is Our Job

Farzie Shelton

ENVIRONMENTAL COORDINATOR, Ch E.

September 3, 1997

Clair H. Fancy, Chief Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Road, MS 5505 Tallahassee, Fl 32399-2400

RE:

C.D. McIntosh, Jr. Power Plant

Title V Permit Application No. 1050004-003-AV

Polk County, Florida

Dear Clair:

Pursuant to Rule 62-4.050 and 62-213 Florida Administrative Code, the Lakeland Electric and Water Utilities hereby submits to the Florida Department of Environmental Protection's Bureau of Air Regulation (Department) a revision to the Title V permit application, in quadruplicate, for the C.D. McIntosh Jr. Power Plant. This submittal include replacement of segment information pages for units ID 001 (unit 1), 005 (unit 2), ID 006 (unit 3), and the two diesel peaking units 2 and 3. Additionally, you will find enclosed two diskettes (electronic data submittal) containing all requested modification to this application. The enclosed document has been signed and sealed by Mr. Ken Kosky, P.E. of Golder Associates, Inc. and certified by Lakeland's Responsible Official Mr. Ronald W. Tomlin, Assistant Managing Director.

Sincerely

Farzie Shelton

Manager of Environmental Permitting & Compliance

Production Division

Enc.

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SEP 04 1997

BUREAU OF AIR REGULATION

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official: Ronald W. Tomlin, Assistant Managing Director

2. Owner/Authorized Representative or Responsible Official Mailing Address:

Organization/Firm: Lakeland Electric & Water Utilities

Street Address: 501 East Lemon Street

City: Lakeland

State: FL

Zip Code: 33801-5079

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:

Telephone:

(941) 499-6300

Fax: (941) 499-6344

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative * of the non-Title Vsource addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.

-ald W

8-14-97

Signature

Date

^{*} Attach letter of authorization if not currently on file.

4. Professional Engineer's Statement:

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

- (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
- (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

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

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

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

Signature.

Date

Attach any exception to certification statement.

7

DEP Form No. 62.210.900(1) - Form

Effective: 03-21-96

Segment Description and Rate: Segment 2 of 5

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Natural Gas					
2. Source Classification Code (SCC):	1-01-006-01				
3. SCC Units: Million Co	ubic Feet				
4. Maximum Hourly Rate: 0.97	5. Maximum Annual Rate: 8,497				
6. Estimated Annual Activity Factor:					
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:				
9. Million Btu per SCC Unit:	1,024				
10. Segment Comment (limit to 200 characters): Maximum hourly rate based on maximum heat input.					
· ,					
·					
	· 				

Segment Description and Rate: Segment 4 of 5

(limit to 500 characters): Propane	pe and Associated Operating Method/Mode)
2. Source Classification Code (SCC):	1-01-010-02
3. SCC Units: 1,000 g	allons
4. Maximum Hourly Rate: 10.88	5. Maximum Annual Rate: 95,344
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	91
	acters): ded to 91). Maximum hourly rate based on r. Fuel does not increase emissions of any

Emissions	Unit	Information	Section	1	of	7

FFFSG Unit 1

F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment ____ of ____

1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):				
Distillate (No. 2) Oil				
·				
2. Source Classification Code (SCC):	·			
	-01-005-01			
A 20077	<u>·</u>			
3. SCC Units:				
1,000 gallons				
4. Maximum Hourly Rate:	5. Maximum Annual Rate:			
7.3	63,912			
6. Estimated Annual Activity Factor:	-			
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:			
0.5				
9. Million Btu per SCC Unit:				
	135			
10. Segment Comment (limit to 200 char	acters):			
,	,			
Maximum Hourly Rate based on maximum heat input for oil firing. Unit can be co-fired with other fuels. Fuel does not increase emissions of any pollutant.				
4				

Segment Description and Rate: Segment 2 of 4

Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Natural Gas					
2. Source Classification Code (SCC):	1-01-006-01				
3. SCC Units: Million Co	ubic Feet				
4. Maximum Hourly Rate: 1.16	5. Maximum Annual Rate: 10,133				
6. Estimated Annual Activity Factor:					
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:				
9. Million Btu per SCC Unit:	1,024				
10. Segment Comment (limit to 200 char Maximum hourly rate based on maxir					

Segment Description and Rate: Segment 4 of 4

 Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Propane 				
2. Source Classification Code (SCC):	1-01-010-02			
3. SCC Units: 1,000 g	allons			
4. Maximum Hourly Rate: 13.09	5. Maximum Annual Rate: 114,703			
6. Estimated Annual Activity Factor:				
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:			
9. Million Btu per SCC Unit:	91			
10. Segment Comment (limit to 200 characters): Million Btu per SCC Unit = 90.5 (rounded to 91). Maximum hourly rate based on maximum heat input. Fuel does not increase emissions of any pollutant.				
	· 			

Emissions Unit Information Section	3	of	7

FFFSG Unit 3

Segment Description and Rate: Segment 4 of 7

Segment Description (Process/Fuel Type (limit to 500 characters): Distillate (No.2) Oil Source Classification Code (SCC):	pe and Associated Operating Method/Mode) . 1-01-005-01
3. SCC Units: 1,000 g	allons
4. Maximum Hourly Rate: 26.96	5. Maximum Annual Rate: 236,196
6. Estimated Annual Activity Factor:	
7. Maximum Percent Sulfur: 0.5	8. Maximum Percent Ash:
9. Million Btu per SCC Unit:	135
10. Segment Comment (limit to 200 charsed Maximum Hourly Rate based on maxiemissions of any pollutant.	acters): mum input of unit. Fuel does not increase

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

Emissions	Unit	Information	Section	3	of	7

FFFSG Unit 3

F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment _____ of _____ 1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters): Propane 2. Source Classification Code (SCC): 1-01-010-02 3. SCC Units: 1,000 gallons 4. Maximum Hourly Rate: 5. Maximum Annual Rate: 40.22 352,336 6. Estimated Annual Activity Factor: 7. Maximum Percent Sulfur: 8. Maximum Percent Ash: 9. Million Btu per SCC Unit: 91 10. Segment Comment (limit to 200 characters): Million Btu per SCC Unit = 90.5 (rounded to 91). Fuel does not increase emissions of any pollutant.

C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

Emissions	Unit	Detail	ls
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1. Initial Startup Date: 1 Jan 1970	
2. Long-term Reserve Shutdown Date:	
3. Package Unit: Manufacturer:	Model Number:
4. Generator Nameplate Rating:	5 MW
5. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Afterburner Temperature:	°F seconds °F

Emissions Unit Operating Capacity

Maximum Heat Input Rate:		28	mmBtu/hr	
2. Maximum Incineration Rate:	lbs/hr		tons/day	
3. Maximum Process or Throughput Ra	ate:			
4. Maximum Production Rate:				
5. Operating Capacity Comment (limit to	to 200 characters)		-	
Maximum heat input is for each diesel peaking unit. Represents previously permitted fuel input. These units have not been modified as defined in Rule 62-210.200 F.A.C.				

Emissions Unit Operating Schedule

1. Requested Maximum Operating Schedule:					
hou	ırs/day		days/week		
wee	eks/yr 8,7 6	0	hours/yr		

Excellence Is Our Goal, Service Is Our Job

Farzie Shelton

ENVIRONMENTAL COORDINATOR, Ch E.

August 6, 1997

Scott Sheplak, P.E.
Administrator, Title V Permit Program
Bureau of Air Regulation
Florida Department of Environmental Protection
Magnolia Park Courtyard
Tallahassee, FL 32301

RE:

C.D. McIntosh, Jr. Power Plant

Draft Title V Permit No. 1050004-003-AV

Polk County, Florida

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AUG 07 1997

BUREAU OF AIR REGULATION

Dear Scott:

Lakeland Electric and Water Utilities (Lakeland) would like to thank you and your staff for meeting with our representatives on July 21 to discuss the draft Title V permit for the C.D. McIntosh, Jr. Power Plant. We feel that significant progress toward resolution of our concerns was made at that meeting. As a follow-up to the meeting, we received the Department's draft response to Lakeland's comments, and while many of the agreements reached at the meeting were reflected in that document, we remain concerned about a few issues identified below. These issues are important to Lakeland. Therefore, we feel that they should be addressed prior to the proposed permit being issued. Lakeland would like to continue to work with the Department toward a final resolution of this matter within the next several days.

- (A. Use of Propane (Item 1 on page 2)—The new Condition D.3. should allow propane to be cofired with the other fuels, consistent with new Condition A.3. and the explanation on page 1. This appears to be an inadvertent error. The language should read: "The only fuels allowed to be burned are natural gas, propane, No. 6 Fuel Oil, No. 2 Fuel Oil and combinations of propane, natural gas, No. 6 Fuel Oil and/or No. 2 Fuel Oil."
- B. Use of No. 2 Fuel Oil in Unit 001 (Item 4, page 5)--As discussed at our meeting, we believed that we had included a segment page for the use of No. 2 fuel oil in the supplemental submittal made in February. We had inadvertently confused the unit numbers for Units 001 and 005, and we will make a new submittal with a segment page for Unit 001 within the next few days. Hopefully this information will be sufficient to allow the use of No. 2 fuel oil as a permitted fuel for Unit 001. We apologize for any inconvenience, but would very much appreciate the authority to use No. 2 fuel oil in this unit.
- C. Used Oil Sampling and Analysis (Item 8, page 8)--Lakeland again requests that Condition A.30 be revised to clarify that generator knowledge, in lieu of actual fuel sampling and analysis, can be used to determine compliance with the "on-specification" requirements, consistent with the federal rules. Specifically, 40 CFR § 279.72(a) provides that a determination as to compliance with the specifications may be based on analyses "or other information"

documenting that the used oil meets the specifications." Since federal law allows "other information" to be used, Lakeland's air permit should as well. This change would be consistent with the provisions in the current air operation permit for Unit 001. This was discussed at the meeting, and we were under the impression that as long as the current permit language allowed the use of generator knowledge and it was not inconsistent with federal law, that it would be allowed. Lakeland therefore again requests that Condition A.30 be revised as follows:

- A30. Compliance with the "on-specification" used oil requirements will be determined as follows: . . . or (c) based on generator knowledge as appropriate.
- Testing Requirements for Diesel Engines (Item 9, page 8)--The Department's rules require annual testing of visible emissions if a visible emissions limit applies. Because the "less than 20 percent opacity" standard applies to the diesel engines, Lakeland requested that the permit alter the standard requirement and not require annual compliance testing during years when a unit operates for less than 400 hours on fuel oil. Lakeland believed that it had reached an agreement with the Department on this point during our meeting. Certainly the Department has the authority to allow this, and it is consistent with the testing requirements for the gas turbine. Without a permit condition stating that annual testing is not required, however, we believe that Lakeland could be required under Condition B.15, referenced in the Department's draft response, to conduct annual testing. While this condition provides that units on cold or long-term standby under the specific provisions of Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., and that do not operate for more than 400 hours, are not required to conduct annual or renewal compliance testing, this exemption does not apply. The diesel units at the McIntosh Plant are not on cold or long-term standby during years when they operate for less than 400 hours and would not be eligible for the exemption. Lakeland therefore again requests the following additional condition be added to the permit under Section B, as agreed to at our meeting:
 - B. Visible Emissions Testing--Annual. By this permit, annual emissions compliance testing for visible emissions is not required unless a unit operates more than 400 hours during the prior year, excluding periods of startup.
- E. Heat Input Rates for Diesel Engines and Gas Turbine (Item 11, page 8)—At our meeting, we discussed Lakeland's request to change the restrictions on fuel consumption rates to heat input limits, which more accurately reflect the capacity of the units. It was our understanding from the meeting that as long as no "modifications" had been made to alter the heat input rates or capacity of the units, the "change" would be made. Lakeland submitted the certification statement that no modifications had been made to the gas turbine and will, within the next few days, submit a similar statement for the diesel engines. Unfortunately, the draft response document from the Department attempts to include both the heat input limits as requested by Lakeland as well as the previous fuel usage documents. The only reasoning provided was that the fuel usage limits had been included in the prior operation permits. As you

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are aware, the Title V permits are to be used as a vehicle to "clean up" obsolete provisions and to ensure consistent permit conditions. Because heat input limits are typically used by the Department to limit a unit's capacity, and Lakeland has demonstrated that the heat input limits are equivalent to the fuel usage limits, Lakeland respectfully requests that the fuel usage limits be deleted and replaced with the heat input limits, consistent with the agreement reached at our meeting. This would be consistent with other permits and permit conditions, and would eliminate the duplicative and unnecessary dual restrictions on the unit's capacity.

- F. Sulfur Dioxide CEM for Unit 005 (Item 14, page 18)--In the explanation for the revisions to Condition D.11, the Department states that a continuous emissions monitor for Unit 005 is not required. There were no changes made to Condition D.11 regarding sulfur dioxide emissions, however. It appears that paragraph (2) under D.11 was inadvertently left in the condition when it should have been deleted. Lakeland requests that this change be made before the proposed permit is issued.
- G. Compliance with SO2 Limit on Unit 005 (Item 14, page 21)--Lakeland appreciates the Department's recognition that a fuel sulfur content analysis can be used in lieu of an annual stack test to determine compliance with the sulfur dioxide limit of 0.8 lb/mmBtu for Unit 005. Lakeland had requested that the permit clarify that vendor or permittee data could be used, and we do not recall that the Department took issue with this. The draft response from the Department, however, requires daily as-fired fuel sampling and analysis, for not only fuel oil but for natural gas as well. This is not acceptable to Lakeland, and we again request that the permit provide that vendor or permittee data may be used to demonstrate compliance. This unit is similar to the fossil-fuel-fired boilers at the Charles Larsen Memorial Power Plant, as well McIntosh Unit 1, which are allowed to use vendor or permittee data. Lakeland therefore requests that the draft Title V permit be revised to clearly authorize the use of vendor or permittee data to demonstrate compliance with the sulfur dioxide limit.
 - D17. The owner or operator shall determine compliance with the particulate matter, SO2, and NOx standards in 40 CFR 60.42, 60.43, and 60.44 as follows: . . .
 - (4) <u>Sulfur Dioxide</u>. The permittee may demonstrate compliance with the sulfur dioxide emissions limit based on a fuel analysis provided by the vendor or the permittee.
- H. Annual NOx Testing (Item 15, page 22)--As explained at the meeting, the only exemption for annual testing when fuel oil is fired for less than 400 hours is for particulate matter emissions. This exemption does not apply to nitrogen oxides. Further, the exemption for units on cold or long-term standby under Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., does not apply when a unit primarily uses natural gas, or is simply not operated for more than 400 hours during the prior year on fuel oil. The primary purpose of this request was to clarify that only a single annual compliance test on nitrogen oxides is required--firing the worst-case fuel

used during the prior year. Lakeland again requests that the permit be clarified to prevent the need to conduct duplicative testing on oil and gas, and ensure that the annual testing is conducted using the worst-case fuel.

- D . By this permit, annual compliance testing for nitrogen oxides shall be conducted while firing fuel oil if it has been used for more than 400 hours during the prior year (other than during startup); otherwise, it shall be conducted while firing natural gas.
- NSPS Subpart A Incorporation by Reference (Item 16, page 22)-While it was I. discussed at the meeting that the applicable provisions of Subpart A of the New Source Performance Standards would be incorporated into the permit, there was no mention by the Department that the entire Subpart would be incorporated. Because much of this subpart does not apply to Units 005 and 006 and because portions of the subpart apply to the U.S. Environmental Protection Agency or the Department, Lakeland requests that the term "applicable" be added to the condition, so that it reads "The permittee shall comply with the applicable requirements contained in Appendix 40 CFR 60, Subpart, attached to this permit." In the alterative, the Department could specifically list the provisions under Subpart A that apply to these units, as enumerated in the list of applicable requirements provided in the Title V application for this facility. In addition, it appears that Specific Condition D.36 should be deleted rather than D.38 (since it does not exist).
- Applicability of Rule 62-296.405 (Item 17, page 22)--The Department's draft J. response states that Rule 62-296.405 does not apply to Units 005 and 006. However, because would apply. Lakeland agrees that paragraph (1) of the rule is inapplicable. It is important that the Department recognize the applicability of paragraph (2) of this rule for permit shield purposes.

 K. Excess Emissions for New Units (Item 18, page 22)—While the Department is correct in deleting the conditions related to excess emissions provisions for existing aminoistic address not only these units are fossil-fuel-fired steam generating units with a heat input greater than 250
- address not only malfunctions but startup and shutdown as well. The Department's excess emissions rule for new units, Rule 62-210.700(1), F.A.C., should be quoted in its entirety in Conditions D.12 and E.13 (for Units 005 and 006). It appears that these conditions were inadvertently left as originally drafted, addressing only malfunctions.
- General Standard for VOCs (Item 21, page 24)--Lakeland has submitted a revised application page regarding facility-wide condition 7 that addresses procedures to minimize volatile organic compound (VOC) emissions. Specifically, Lakeland has revised the application

to clarify that containers "containing VOC materials" will be kept closed "when not in use" and has deleted a statement that such containers will always be stored in "weather-tight buildings." This revision was submitted on July 31. Lakeland therefore requests that the draft Title V permit be revised accordingly.

- M. Summary Tables (Items 27 and 28, page 25)--Lakeland requests an opportunity to review the summary tables prior to the proposed permit being issued. While we understand that the tables are not enforceable provisions of the permit, they do reflect the Department's interpretation of various permit conditions; thus we believe that it would be very beneficial if we had an opportunity to review them.
- N. Insignificant Activities--Based on our understanding of the recent meeting between the Department and the Florida Electric Power Coordinating Group (FCG) on August 5, we understand that the Department will include additional language from Rule 62-213.430(6)(a), F.A.C., in Appendix E-1 clarifying that insignificant emission units or activities that are added to a Title V source after issuance of the Title V permit shall be incorporated into the permit renewal, provided that such units are eligible for exemption (or insignificant status). If our understanding is correct, please make this change to our Appendix E-1.
- O. Unconfined Particulate Matter--It is also our understanding from the recent meeting between the Department and the FCG that the Department is agreeable to adding a permitting note to the specific condition identifying precautions for minimizing unconfined particulate matter emissions (Facility-wide Condition 8) clarifying that it would control over the general condition in Appendix TV-1 (Condition 58) and would implement the Department's Rule 62-296.320(c), F.A.C. If our understanding is correct, Lakeland requests this permitting note be added to Facility-wide Condition 8.
- P. Averaging Periods for Sulfur Dioxide and Nitrogen Oxides for Units 005 and 006-While Lakeland has not previously requested this clarification, it would be very helpful if a simple permitting note could be added for Unit 005 under Conditions D.7 and D.9, and for Unit 006 under Conditions E.7 and E.10, stating that compliance with these limits is based on a three-hour average (arithmetic average of three one-hour periods) consistent with the provisions of 40 CFR 60.45(g). This will help clarify the averaging period of the emission limits, consistent with the New Source Performance Standards.

Thank you again for your continued cooperation. We look forward to hearing from you soon regarding the issues we have raised in this letter. If we do not hear from you within a week, we will contact you to arrange a telephone conference call to further discuss these issues. If you or your staff have any questions, please contact me at 941-499-6603.

Sincerely,

Farzie Shelton

Environmental Coordinator

cc: Howard L. Rhodes, DEP
Clair Fancy, DEP
Pat Comer, DEP OGC
Edward Svec, DEP
Ronald Tomlin, Lakeland
Ken Kosky, Golder
Angela Morrison, HGSS

THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

RECEIVED

AUG 05 1997

In the Matter of an Application for Permit by:

OGC No. 97-1107

BUREAU OF AIR REGULATION

Lakeland Electric & Water Utilities 501 East Lemon Street Lakeland, Florida 33801-5079

DRAFT Permit No.: 1050004-003-AV C.D. McIntosh, Jr. Power Plant

Polk County

REQUEST FOR EXTENSION OF TIME

By and through undersigned counsel, Lakeland Electric & Water Utilities (Lakeland) hereby requests, pursuant to Florida Administrative Code Rules 28-106.111(3) and 62-103.050(1), an extension of time, to and including August 18, 1997, in which to file a Petition for Administrative Proceedings or a Request for Mediation in the above-styled matter. As good cause for granting this request, Lakeland states the following:

- 1. On or about June 6, 1997, Lakeland received from the Department of Environmental Protection (Department) an "Intent to Issue Title V Air Operation Permit" (Permit No. 1050004-003-AV) for the C.D. McIntosh, Jr. Power Plant located in Polk County, Florida. Along with the Intent to Issue, Lakeland received a draft Title V permit and "Public Notice of Intent to Issue Title V Air Operation Permit."
- 2. By order dated July 11, 1997, the Department granted an extension of time until July 21, 1997, within which to file a petition for an administrative hearing. Lakeland requested an additional extension until August 4, 1997. While an order officially granting this request has not yet been issued, a representative from the Department orally agreed to the extension until August 4, 1997.

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- 3. Based on Lakeland's review, the draft permit and associated documents contain several provisions that warrant clarification or correction.
- 4. Lakeland has corresponded and met with Department representatives in an effort to resolve the issues identified and only a few issues remain.
- 5. Lakeland believes that the remaining issues can be resolved without the need for a formal hearing or mediation.
- 6. This request is filed simply as a protective measure to avoid waiver of Lakeland's right to challenge certain conditions contained in the draft Title V permit. Grant of this request will not prejudice either party, but will further their mutual interest and likely avoid the need to file a petition and proceed to a formal administrative hearing or formal mediation.
- 7. Scott Sheplak with the Bureau of Air Regulation has agreed to a 14-day extension on behalf of the Department. Counsel for Lakeland has also contacted W. Douglas Beason with the Office of General Counsel regarding this request, and he has no objection.

WHEREFORE, Lakeland respectfully requests that the time for filing of a Petition for Administrative Proceedings or a Request for Mediation in regard to the Department's Intent to Issue Title V Air Operation Permit for Permit No. 1050004-003-AV be formally extended to and including August 18, 1997.

Respectfully submitted this 4th day of August, 1997.

HOPPING GREEN SAMS & SMITH, P.A.

Angela R. Morrison, Fla., Bar No. 0855766

123 South Calhoun Street Post Office Box 6526 Tallahassee, FL 32314

(904) 222-7500

Attorney for LAKELAND ELECTRIC & WATER UTILITIES

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing has been furnished to the following by U.S. Mail on this 4th day of August, 1997:

Clair H. Fancy, P.E. Chief Bureau of Air Regulation Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2600

W. Douglas Beason Office of General Counsel Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2600

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Excellence Is Our Goal, Service Is Our Job

Farzie Shelton

ENVIRONMENTAL COORDINATOR, Ch E.

July 31, 1997

RECEIVED

AUG 04 1997

BUREAU OF AIR REGULATION

Clair H. Fancy, Chief Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Road, MS 5505 Tallahassee, Fl 32399-2400

RE:

C.D. McIntosh, Jr. Power Plant

Title V Permit Application No. 1050004-003-AV

Polk County, Florida

Dear Clair:

Pursuant to Rule 62-4.050 and 62-213 Florida Administrative Code, the Lakeland Electric and Water Utilities hereby submits to the Florida Department of Environmental Protection's Bureau of Air Regulation (Department) a revision to the Title V permit application, in quadruplicate, for the C.D. McIntosh Jr. Power Plant. This submittal include addition of segment information pages for units ID 005 (unit 2), ID 006 (unit 3) ID 004 (gas turbine peaking unit 1), and the two diesel peaking units 2 and 3, attachments LMC-EU5-C6, LMC-EU2-H, and LMC-EU3-H. Additionally this submittal revises the Attachment LMC-FE-5 "Fugitive Emissions Identification". We would like to bring to your attention that segment page 3 of 4 for ID 005 (unit 2) in respect of the distillate oil dated January 29, 1997 was submitted to you with a letter dated February 7, 1997. However, since your staff were unable to locate this segment, we are resubmitting the same dated July 25, 1997 for your files. The enclosed document has been signed and sealed by Mr. Ken Kosky, P.E. of Golder Associates, Inc. and certified by Lakeland's Responsible Official Mr. Ronald W. Tomlin, Assistant Managing Director.

Sincerely

Farzie Shelton

Environmental Division

Enc.

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:

Ronald W. Tomlin, Assistant Managing Director

2. Owner/Authorized Representative or Responsible Official Mailing Address:

Organization/Firm: Lakeland Electric & Water Utilities

Street Address: 501 East Lemon Street

City: Lakeland

State: FL

Zip Code:

33801-5079

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:

Telephone:

(941) 499-6300

Fax: (941) 499-6344

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.

Signature

Date

* Attach letter of authorization if not currently on file.

4. Professional Engineer's Statement:

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

- (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
- (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

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

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

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

Demil 7/55 Date

7

DEP Form No. 62.210.900(1) - Form

Effective: 03-21-96

^{*-}Attach any exception to certification statement.

F. SEGMENT (PROCESS/FUEL) INFORMATION (Regulated and Unregulated Emissions Units)

Segment Description and Rate: Segment ___ of __4

	·	
1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode) (limit to 500 characters):		
Distillate (No.2) Oil		
. ·		
2. Source Classification Code (SCC):		
	-01-005-01	
3. SCC Units:	<u> </u>	
1,000 gallons		
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	
8.26	72,351	
6. Estimated Annual Activity Factor:		
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:	
0.5		
	<u> </u>	
9. Million Btu per SCC Unit:	135	
10. Segment Comment (limit to 200 char	acters):	
	num heat input for oil firing. Unit can be co-fired with	
natural gas. Fuel does not increase er		

Emissions	Unit Information Section	2	_ of	7 .
Allowable	Emissions (Pollutant ident	tified or	front	nage)

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1.	Basis for Allowable Emissions Code: RULE
2.	Future Effective Date of Allowable Emissions:
3.	Requested Allowable Emissions and Units:
	0.3 lb/MMBtu
4.	Equivalent Allowable Emissions: 335 lb/hour 1,465 tons/year
5.	Method of Compliance (limit to 60 characters):
	Annual stack test; EPA Methods 7,7A,7C,7D,7E; see LMC-EU2-H
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):
	Allowable based on oil firing pursuant to 62-296.405(2)(d) and 62-296.800 FAC; 40 CFR Part 60, Subpart D, Sect. 60.44. If co-firing of oil and gas, the emission limit is prorated based on heat input.

В.

Basis for Allowable Emissions Code: RULE	
2. Future Effective Date of Allowable Emissions:	
Requested Allowable Emissions and Units: O.2 lb/MMBtu	
4. Equivalent Allowable Emissions: 237 lb/hour	1,038 tons/year
5. Method of Compliance (limit to 60 characters): Annual stack test; EPA Methods 7,7A,7C,7D,7E; see LMC-EU2-H	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operation)	ng Method/Mode)

 Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

Allowable based on natural gas firing pursuant to 62-296.405(2)(d) and 62-296.800 FAC; 40 CFR Part 60, Subpart D, Sect. 60.44. If co-firing oil and gas, emission limit is prorated based on heat input.

Emissions Unit Information Sectio	n2	of _	7	
Allowable Emissions (Pollutant ide	entified o	n front	page)	

Α.			
1.	Basis for Allowable Emissions Code: RULE		
2.	Future Effective Date of Allowable Emissions:	_	
3.	Requested Allowable Emissions and Units:		
	0.2 lb/MMBtu/hr		
4.	Equivalent Allowable Emissions:	lb/hour	tons/year
5.	Method of Compliance (limit to 60 characters):		

6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

Requested Allowable Emissions 0.2 to 0.3 lb/MMBtu/hr. 40 CFR 60.44(b) allows simultaneous firing of fuels.

B.

1.	Basis for Allowable Emissions Code:	
2.	Future Effective Date of Allowable Emissions:	
3.	Requested Allowable Emissions and Units:	
4.	Equivalent Allowable Emissions: lb/hour	tons/year
5.	Method of Compliance (limit to 60 characters):	
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Me (limit to 200 characters):	thod/Mode)

Emissions	Unit Inform	nation Section	3	_ of _	7
Allowable	Emissions	(Pollutant iden	tified on	front	page)

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1.	Basis for Allowable Emissions Code: RULE
2.	Future Effective Date of Allowable Emissions:
3.	Requested Allowable Emissions and Units:
	0.7 lb/MMBtu
4.	Equivalent Allowable Emissions: 2,548 lb/hour 11,160 tons/year
5.	Method of Compliance (limit to 60 characters):
	Annual stack test; EPA Methods 7,7A,7C,7D,7E; see LMC-EU3-H
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):
	Coal/Pet Coke/RDF firing; based on FDEP Rule 62-204.800(7)(b)1.; 40 CFR Part 60, Subpart D, Section 60.44(a)(3); PSD-FL-008.

B.

1.	Basis for Allowable Emissions Code: RULE
2.	Future Effective Date of Allowable Emissions:
3.	Requested Allowable Emissions and Units: 0.3 lb/MMBtu
4.	Equivalent Allowable Emissions: 1,092 lb/hour 4,783 tons/year
5.	Method of Compliance (limit to 60 characters): Annual stack test; EPA Methods 7,7A,7C,7D,7E; see LMC-EU3-H
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters): Oil firing, based on FDEP Rule 62-204.800; 40 CFR 60.44(a)(2); PSD-FL-008.

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

Emissions Unit Information Section	3	of _	7
Allowable Emissions (Pollutant iden	tified o	n front	page)

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1.	Basis for Allowable Emissions Code: RULE				
2.	Future Effective Date of Allowable Emission	 1S:			
3.	Requested Allowable Emissions and Units:				
	0.2 lb/MMBtu/hr				
4.	Equivalent Allowable Emissions:	728	lb/hour	3,188.6 tons	s/year
5.	Method of Compliance (limit to 60 character	rs):			
	Annual stack test; EPA Methods 7,7A,7C,7D,7	7E; s	ee LMC-EU3-H		
6.	Pollutant Allowable Emissions Comment (De (limit to 200 characters):	esc.	of Related Ope	rating Metho	od/Mode)
	Gas firing; based on FDEP Rule 62-204.800(7)(b PSD-FL-008.)1.;	40 CFR 60, Sub	part D, Sectio	n 60.44(a)(1);
				•	
В.					
1:	Basis for Allowable Emissions Code: RULE				
2.	Future Effective Date of Allowable Emission	1S:			
3.	Requested Allowable Emissions and Units:				
	See Comment				
4	Equivalent Allowable Emissions:		lb/hour		tons/year

5. Method of Compliance (limit to 60 characters):

6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) (limit to 200 characters):

Requested Allowable Emissions and Units = 0.2 to 0.7 lb/MMBtu. 40 CFR 60.44(b) allows co-firing of fuels.

29

DEP Form No. 62-210.900(1) - Form Effective: 03-21-96

C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

Emissions Unit Details

1. Initial Startup Date: 1 Jan 1970	
2. Long-term Reserve Shutdown Date:	·
Package Unit: Manufacturer:	Model Number:
4. Generator Nameplate Rating:	5 MW
5. Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Afterburner Temperature:	°F seconds °F

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:		28	mmBtu/hr
2. Maximum Incineration Rate:	lbs/hr		tons/day
3. Maximum Process or Throughput Rate	:	,	
4. Maximum Production Rate:			
5. Operating Capacity Comment (limit to	200 characters) :	
Maximum heat input per diesel peaking unit;	represents prev	iously permi	itted maximum fuel input.
,			

Emissions Unit Operating Schedule

Requested Maximum Operating Schedule:		
hours/day		days/week
weeks/yr	8,760	hours/yr

C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

Emissions Unit Details

1.	Initial Startup Date: 1 Jan 1973			
2.	Long-term Reserve Shutdown Date:			
3.	Package Unit: Manufacturer:		Model Number:	
4.	Generator Nameplate Rating:	20	MW	
5.	Incinerator Information: Dwell Temperature: Dwell Time: Incinerator Afterburner Temperature:		°F seconds °F	

Emissions Unit Operating Capacity

1. Maximum Heat Input Rate:	330	mmBtu/hr
2. Maximum Incineration Rate:	lbs/hr	tons/day
3. Maximum Process or Throughput Ra	ate:	
4. Maximum Production Rate:		
5. Operating Capacity Comment (limit t	o 200 characters):	
See Attachment LMC-EU5-C5, and I	LMC-EU5-C6.	
	·	•

Emissions Unit Operating Schedule

1. Requested Maximum Operation	g Schedule:		
	hours/day		days/week
	weeks/yr	8,760	hours/yr

ATTACHMENT LMC-EU5-C6 OPERATING CAPACITY COMMENT

Maximum heat input shown for natural gas. Maximum heat input for oil is 330 MMBtu/hr. Represents previously permitted fuel input. This source has not been modified as defined in 40 CFR 60.14 or reconstructed as defined in 40 CFR 60.15.

ATTACHMENT LMC-EU2-H McIntosh Unit 2

The initial performance tests conducted under 40 Code of Federal Regulations (CFR) Section 60.8 have demonstrated that the emissions of nitrogen oxides were less than 70 percent of the applicable standards in 40 CFR Section 60.44. Pursuant to Section 60.45(b)(3), a continuous monitoring system for nitrogen oxides is not required. The initial performance test conducted in February 1977 demonstrated that the emissions of nitrogen oxides were 43 percent of the NSPS emission limit.

ATTACHMENT LMC-EU3-H McIntosh Unit 3

The initial performance tests conducted under 40 Code of Federal Regulations (CFR) Section 60.8 have demonstrated that the emissions of nitrogen oxides were less than 70 percent of the applicable standards in 40 CFR Section 60.44. Pursuant to Section 60.45(b)(3), a continuous monitoring system for nitrogen oxides is not required. The initial performance test conducted in February 1983 demonstrated that the emissions of nitrogen oxides were 60 percent of the NSPS emission limit.

ATTACHMENT LMC-FE-5 FUGITIVE EMISSIONS IDENTIFICATION

Many fugitive emissions at the plant site have been classified as either "trivial activities," or are requested to be exempted under Rule 62-213.430(b). The types of fugitive emissions that are included as trivial or exempt are discussed below.

Criteria and Precursor Air Pollutants

Fugitive particulate emissions are addressed in Attachment LMC-FE-4. COL is not aware of fugitive emission of sulfur dioxide, nitrogen oxides, carbon monoxide, or lead compounds which would exceed the thresholds defined in the permit application instructions.

Volatile Organic Compounds (VOCs)

Fugitive emissions of VOCs include those resulting from the use of cleaners and solvents for maintenance and operation. VOCs are also emitted by the various fuel oil storage tanks on the plant property, and by the combustion turbines and the fossil-fuel steam generators. VOC emissions for storage tanks are covered in the facility-wide fugitive *Emission Unit* section of this permit application.

Fugitive HAPs Emissions

The following hazardous air pollutants are or may be present on the facility property and are potential sources of fugitive HAPs emissions:

- asbestos
- benzene
- chlorine
- hydrazine
- hydrochloric acid

- mercury compounds
- methyl ethyl ketone
- toluene
- xylene

Asbestos - Present in gasket material, pipe insulation, and various other locations. The facility complies with the federal NESHAPS (40 CFR 61 Subpart M) and state rules (62-257, F.A.C.) governing the abatement of asbestos-containing materials. No releases of asbestos are expected for the facility.

Benzene - Present in unleaded gasoline. The facility maintains a storage tank for unleaded gasoline. These emissions have been calculated to be significantly less than 1 TPY.

Chlorine - Used for water treatment at the facility.

Hydrazine - Hydrazine solution may be used for the treatment of boiler water.

Hydrochloric Acid - The facility may utilize hydrochloric acid in cleaning filter beds in the water treatment facility at the chemistry laboratory for use in analytical procedures.

Mercury Compounds - The facility uses mercury-containing compounds in the chemistry laboratory for use in analytical procedures and flow-measuring equipment.

Methyl Ethyl Ketone, Toluene, Xylene - The facility uses paint thinners and solvents (which may contain MEK, toluene, or xylene) for use in plant maintenance activities. These containers are kept closed.

Regulated Toxic or Flammable Substances

The following regulated toxic or flammable substances are or may be present at the facility:

- ammonia (aqueous, concentration 20% or greater)
- chlorine
- hydrazine

- hydrochloric acid
- nitric acid
- acetylene
- methane (natural gas)

Ammonia - Used for boiler water treatment.

Chlorine, Hydrazine, Hydrochloric Acid - Considered on the preceding page.

Nitric Acid - Nitric acid may be used in the chemistry laboratory for use in analytical procedures.

Acetylene - Present on the facility property in 250-lb cylinders which are used for plant maintenance (welding and cutting).

Methane - Is a primary component of natural gas. The facility has a natural gas pipeline which delivers fuel to the generating units. This fuel delivery system is normally airtight, but does have safety valves which occasionally relieve (open) when an overpressure condition develops in the gas line.

THE STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

RECEIVED

JUL 21 1997

In the Matter of an Application for Permit by:

OGC No. 97-1107

BUREAU OF AIR REGULATION

Lakeland Electric & Water Utilities 501 East Lemon Street Lakeland, Florida 33801-5079

DRAFT Permit No.: 1050004-003-AV C.D. McIntosh, Jr. Power Plant Polk County

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- 1. On or about June 6, 1997, Lakeland received from the Department of Environmental Protection (Department) an "Intent to Issue Title V Air Operation Permit" (Permit No. 1050004-003-AV) for the C.D. McIntosh, Jr. Power Plant located in Polk County, Florida. Along with the Intent to Issue, Lakeland received a draft Title V permit and "Public Notice of Intent to Issue Title V Air Operation Permit."
- 2. By order dated July 11, 1997, the Department granted an extension of time until July 21, 1997, within which to file a petition for an administrative hearing.
- 3. Based on Lakeland's preliminary review, the draft permit and associated documents contain several provisions that warrant clarification or correction.

- 4. Lakeland has corresponded with the Department, identifying issues and suggesting changes, and a meeting among representatives from Lakeland and the Department's Bureau of Air Regulation has been scheduled for July 21, 1997, in an effort to finally resolve these issues.
- 5. Lakeland believes that the issues it has identified can be resolved without the need for a formal hearing or mediation.
- 6. This request is filed simply as a protective measure to avoid waiver of Lakeland's right to challenge certain conditions contained in the draft Title V permit. Grant of this request will not prejudice either party, but will further their mutual interest and likely avoid the need to file a petition and proceed to a formal administrative hearing or formal mediation.
- 7. Scott Sheplak with the Bureau of Air Regulation has agreed to a 14-day extension on behalf of the Department. Counsel for Lakeland has attempted without success to contact W. Douglas Beason with the Office of General Counsel regarding this request.

WHEREFORE, Lakeland respectfully requests that the time for filing of a Petition for Administrative Proceedings or a Request for Mediation in regard to the Department's Intent to Issue Title V Air Operation Permit for Permit No. 1050004-003-AV be formally extended to and including August 4, 1997.

Respectfully submitted this 18th day of July, 1997.

HOPPING GREEN SAMS & SMITH, P.A.

Angela R. Morrison, Fla. Bar No. 0855766 123 South Calhoun Street

Post Office Box 6526 Tallahassee, FL 32314

(904) 222-7500

Attorney for LAKELAND ELECTRIC & WATER UTILITIES

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing has been furnished to the following by U.S. Mail on this 18th day of July, 1997:

Clair H. Fancy, P.E. Chief Bureau of Air Regulation Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2600

W. Douglas Beason Office of General Counsel Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399-2600

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Excellence Is Our Goal, Service Is Our Job

Farzie Shelton

ENVIRONMENTAL COORDINATOR, Ch E.

July 7, 1997

FUI

Clair H. Fancy, Chief Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Road, MS 5505 Tallahassee, Fl 32399-2400 Bine Mattella

RE:

C.D. McIntosh, Jr. Power Plant

Title V Permit Application No. 1050004-003-AV

Polk County, Florida

Dear Clair:

Pursuant to Rule 62-4.050 and 62-213 Florida Administrative Code, the Lakeland Electric and Water Utilities hereby submits to the Florida Department of Environmental Protection's Bureau of Air Regulation (Department) a revision to the Title V permit application, in quadruplicate, for the C.D. McIntosh Jr. Power Plant. This submittal revises the Attachment LMC-FE-4 "Precautions To Prevent Emissions Of Unconfined Particulate Matter". The enclosed document has been signed and sealed by Mr. Ken Kosky, P.E. of Golder Associates, Inc. and certified by Lakeland's Responsible Official Mr. Ronald W. Tomlin, Assistant Managing Director.

Sincerely

Farzie Shelton

Environmental Division

Enc.

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JUL 08 1997

BUREAU OF AIR REGULATION

Ow:	ner/Authorized Representative or Responsible Official
1.	Name and Title of Owner/Authorized Representative or Responsible Official:
	Ronald W. Tomlin, Assistant Managing Director
2.	Owner/Authorized Representative or Responsible Official Mailing Address:
_	ranization/Firm: Lakeland Electric & Water Utilities Street Address: 501 East Lemon Street City: Lakeland State: FL Zip Code: 33801-5079
3.	Owner/Authorized Representative or Responsible Official Telephone Numbers:
	Telephone: (941) 499-6300 Fax: (941) 499-6344
4.	Owner/Authorized Representative or Responsible Official Statement:
	I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.

* Attach letter of authorization if not currently on file.

Date

Signature

4. Professional Engineer's Statement:

- I, the undersigned, hereby certify, except as particularly noted herein*, that:
- (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
- (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

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

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

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

7

Date

rany exception to certification statement.

DEP Form No. 62.210.900(1) - Form

Effective: 03-21-96

7/1/97

14262Y/F3/TVAL

ATTACHMENT LMC-FE-4

PRECAUTIONS TO PREVENT EMISSIONS OF UNCONFINED PARTICULATE MATTER

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

- Fugitive dust from paved and unpaved roads,
- Fugitive particulates from the use of bagged chemical products,
- Coal handing and storage,
- Limestone handling and storage,
- FGD/ash by-products/handling and storage,
- Municipal solid waste,
- Ash cleaning, and
- Paint removal.

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

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

Excellence Is Our Goal, Service Is Our Job

Farzie Shelton

ENVIRONMENTAL COORDINATOR, Ch E.

June 30, 1997

Clair H. Fancy, Chief Bureau of Air Regulation Florida Department of Environmental Protection Magnolia Park Courtyard Tallahassee, FL 32301

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JUL 02 1997

BUREAU OF AIR REGULATION

RE: C.D. McIntosh, Jr. Power Plant Draft Title V Permit No. 1050004-003-AV Polk County, Florida

Dear Clair:

Lakeland Electric and Water Utilities (Lakeland) would like to again thank you and your staff for the cooperation we received in reaching an amicable resolution on the draft Title V permit for the Charles Larsen Memorial Power Plant. As you know, we recently received the draft Title V permit for our other facility, the C.D. McIntosh, Jr. Power Plant, and we have identified a few issues and concerns, as outlined below, that need to be resolved prior to issuance of a proposed permit. We feel that, while these issues are important to Lakeland, they should be easily resolvable without the need for a hearing. Several of these issues are identical ones we recently resolved for the Larsen Plant, and therefore Lakeland does not anticipate that the process of developing agreeable conditions for the McIntosh Plant should extend beyond the 30-day extension of time with which you previously agreed. To meet this deadline, however, we would like to work as expeditiously as possible with you and your staff to resolve the issues that we have identified, which are as follows:

Startup Fuels--The draft permit lists "propane" as the exclusive "startup fuel" for Units 001, 005, and 006. Startup fuels also include fuel oil and natural gas, and Lakeland therefore requests that Conditions A3, D3, and E3 be revised as follows:

A3/D3. Startup: The only fuels allowed to be burned are is propane. No. 2 fuel oil, natural gas, No. 6 fuel oil, or any combination of these fuels.

E3. Startup: The only fuels allowed to be burned are is propane. No. 2 fuel oil, natural gas, No. 6 fuel oil, coal, petroleum coke, refuse derived fuel, or any combination of these fuels.

Heat Input--Because the most accurate method of measuring the actual heat input is based on the heating value of the fuel used and fuel flow meter data, Lakeland requests that this be identified in the permit Conditions A1, D1, and E1 as the compliance method.

A1/D1/E1. Permitted Capacity. The maximum operation heat input rate is as follows: . . . Compliance with the heat input limits shall be determined based on the heating value of the fuels used and fuel flow meter data.

Fuel Use for Unit 001--Lakeland requests that the description for Unit 001 be revised to reflect a fuel use rate while firing No. 6 fuel oil as "(approximately 6,300 to 6.330 gallons per hour)."

Use of No. 2 Fuel Oil in Unit 001--Consistent with the Title V permit application, Lakeland requests that the description for Unit 001 as well as Conditions A1 and A3 be revised to clearly authorize the use of No. 2 fuel oil, for both startup and normal operations.

Federal Enforceability of Fuel Analysis Requirements--Because the sulfur content limits for the diesel engine peaking units and the gas turbine peaking unit were voluntarily requested by Lakeland and are therefore not federally enforceable, the requirement to demonstrate compliance based on a fuel analysis should also be considered "not federally enforceable." Lakeland requests that this clarification be added to Conditions B9, B12, C9, and C12.

Vendor Data--To clarify that not only may "vendor data" be used to determine compliance with the sulfur content limits but that Lakeland's own as-received data can be used for compliance purposes, Lakeland requests that language to this effect be added to Conditions A15, A20, B9, and C9.

- A15. Sulfur Dioxide. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. . . .
- A20. Sulfur Dioxide.... the permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor <u>or the permittee</u> upon each fuel delivery.
- B9/C9. <u>Not federally enforceable.</u> The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor <u>or the permittee</u> upon each fuel delivery.

ASTM Methods--The latest ASTM methods for determining sulfur content of fuel for Emission Unit 001 (Condition A.21), Emissions Units 002 and 003 (Condition B.12.) and Emission Unit 004 (Condition C.12.) were not cited. As of June 1997, the latest ASTM methods are: D2622-94 (instead of D2622-92) and D129-95 (instead of D129-91).

Used Oil Sampling and Analysis--Lakeland requests that Condition A30 be revised to clarify that it is unnecessary to sample and analyze each batch of used oil delivered. The federal rules do not require a sampling of each batch to determine compliance with the "on-specification" requirements. Rather, the federal rules authorize the use of "generator knowledge" to determine compliance, as indicated in the current air operation permit for Unit 001. The requirement to burn only "on-specification" used oil should be sufficient for enforceability.

A30. Compliance with the "on-specification" used oil requirements will be determined from a sample collected from each batch (1,000 gallons minimum) delivered for firing or based on generator knowledge as appropriate. Evidence of compliance shall be maintained, and provided upon request. See specific condition A.11.

Testing Requirements for Diesel Engines--Lakeland requests that the permit require annual visible emissions testing only if a diesel engine unit operates for more than 400 hours per year, and once prior to renewal. The Department has the authority to allow this, and it is consistent with the testing requirements for the gas turbine. Lakeland therefore suggests the following additional condition be added to the permit under Section B:

B . Visible Emissions Testing--Annual. By this permit, annual emissions compliance testing for visible emissions is not required unless a unit operates more than 400 hours during the prior year, excluding periods of startup.

Gas Turbine Description--The gas turbine has a "nominal nameplate rating" of 20 megawatts. Lakeland requests that the description be revised to delete any reference to a "maximum rated output" of 20 megawatts.

Gas Turbine Peaking Unit 1 consists of a gas turbine which drives a generator producing electrical power at a nominal nameplate rating maximum rated output of 20 megawatts.

Heat Input Rates for Diesel Engines and Gas Turbine--The appropriate capacity limitation on the gas turbine peaking unit and the diesel engine peaking units should be in terms of "heat input rate" rather than a "fuel consumption rate," Lakeland requests that Conditions B1 and C1 be changed accordingly. In addition, because the heat input rate correction curves for the gas turbine peaking units (EU ID No. 004) have previously been provided to the Department, Condition C1 should be revised to reflect the appropriate temperature and the "lower heating value" basis.

- B1. Permitted Capacity. The maximum <u>heat input</u> firing rate of each diesel engine peaking unit is <u>28 mmBtu/hour</u> 201.6 gallons per hour while firing No. 2 fuel oil.
- C1 Permitted Capacity. The maximum heat input firing rate of the turbine is 330 mmBtu/hour while firing natural gas (lower heating value) and 320 mmBtu/hour while firing fuel oil (lower heating value) at 30 degrees F. 320 million cubic feet per hour when firing natural gas or 2,310 gallons per hour when firing No. 2 fuel oil.

C13/D35. Operating Rate during Testing.

b. ... Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report, consistent with the heat input curves previously submitted to the Department based on design conditions.

The phrase "unless otherwise specified in the applicable standard" is not applicable to any of the emission limits under 40 CFR Part 60 Subpart D.

NOx CEMS for Units 005 and 006--Because Units 005 and 006 (McIntosh Units 2 and 3) are not required to install and operate continuous emissions monitoring systems (CEMS) for nitrogen oxides (NOx) under the applicable New Source Performance Standard, Subpart D, Paragraph (3) of Condition D11 and E12 should be deleted. The initial compliance tests for these units indicated that

the NOx levels were less than seventy percent of the standard, and under 40 CFR 60.45(b)(3) NOx CEMS are therefore not required. Lakeland therefore requests that the NOx CEMS requirements in Conditions D11 and D12 be deleted, including the corresponding references to NOx under Condition D29, E29, and E31.

Compliance with SO2 Limit on Unit 005--In lieu of an annual stack test to determine compliance with the sulfur dioxide limit of 0.8 lb/mmBtu for Unit 005, the permittee is authorized by its construction permit to use fuel sampling and analysis. Lakeland requests that the draft Title V permit be revised to clearly authorize the use of fuel sampling and analysis to demonstrate compliance with the sulfur dioxide limit. In addition, because 40 CFR 60.45(b)(2) provides that units without a flue gas desulfurization system, such as Unit 005, are not required to install a CEM for sulfur dioxide and may instead use fuel sampling and analysis to determine compliance. Because a sulfur dioxide CEM is not required under Subpart D, Lakeland requests that Conditions D29, D30, and D31 be deleted and that D28 be revised to include only opacity.

- D17. The owner or operator shall determine compliance with the particulate matter, SO2, and NOx standards in 40 CFR 60.42, 60.43, and 60.44 as follows: . . .
- (4) <u>Sulfur Dioxide</u>. The permittee may demonstrate compliance with the sulfur dioxide emissions limit based on a fuel analysis provided by the vendor or the permittee upon each fuel delivery. Method 6 shall be used to determine the SO2 concentration....
- D28. The owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, and oxygen.

Annual NOx Testing--Similar to the annual testing requirements for particulate matter, Lakeland requests that a new condition be added for Unit 005 to specify that annual NOx testing should be conducted on fuel oil if it has been used for more than 400 hours during the year, and otherwise it is to be conducted on natural gas. This will prevent the need to conduct duplicative testing on oil and gas, and clarify that the annual testing should be conducted using the worst-case fuel.

D_. By this permit, annual compliance testing for nitrogen oxides shall be conducted while firing fuel oil if it has been used for more than 400 hours during the prior year (other than during startup); otherwise, it shall be conducted while firing natural gas.

Performance/Compliance Testing--A portion of 40 CFR 60.8(c) should be included as part of Conditions D.16. and E.17. to indicate that periods of startup, shutdown and malfunction are not representative conditions for performance/compliance tests under 40 CFR 60.8. The Condition should state:

Operations during periods of startup, shutdown and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emissions limit during periods of startup, shutdown and malfunction be considered a violation of the applicable emission limit.

Excess Emissions Reports--Because Units 005 and 006 are "new" rather than "existing" emission units under Rule 62-296.405, Florida Administrative Code, the reporting requirements under paragraph (1) of that rule do not apply and Conditions D34 and E36 should be deleted. In addition, the excess emission reporting requirements under Conditions D32 and E34 should include a reference to 40 CFR 60.7(e), which allows less frequent reporting under certain circumstances.

D32/E34. . . . Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c). Less frequent reporting may be allowed under the provisions of 40 CFR 60.7(e).

Excess Emissions for New Units-Because Units 005 and 006 are "new" rather than "existing" emission units under Rule 62-210.700, paragraph (1) rather than paragraphs (2) and (3) of that rule apply. Conditions D6, D12, D13, E6, E13, and E14 should be revised accordingly.

PSD Permit Conditions--It appears that several of the applicable provisions from the recent revision to the Prevention of Significant Deterioration (PSD) permit for Unit 006 (McIntosh Unit 3) have not been included in the draft Title V permit. Lakeland suggests that the Department consider the December 11, 1995, revision to the PSD permit, a copy of which was included as part of the Title V application.

Objectionable Odor--Lakeland requests that the facility-wide Condition 2 regarding objectionable odor be identified as being "not federally enforceable."

General Standard for VOCs--Lakeland requests that facility-wide condition 7 regarding procedures to minimize volatile organic compound (VOC) emissions be revised to clarify that containers "containing VOC materials" will be kept closed "when not in use" and delete the requirement to store such containers in "weather-tight buildings." A revision to the Title V application addressing this issue is attached as Attachment A.

7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. . . . Containers containing VOC materials shall be kept closed when not in use and stored in weather tight buildings.

General Particulate Matter Standards (Unconfined Emissions)--Lakeland will be forwarding to you in a separate submittal revising its list of reasonable precautions taken to minimize unconfined particulate matter emissions, and requests that the Department make corresponding changes to facility-wide Condition 8 upon receipt of this application modification.

Relevant Documents on File With the Department--Lakeland requests that on page three of the permit, the Department include a reference to the supplemental information filed with the Department on May 7, 1997.

Unregulated Emissions Units and/or Activities--Because the general purpose diesel engines, emergency generators, and general purpose painting have been categorized as "unregulated" rather than "exempt," Lakeland requests that the usage limitations be deleted. This change should be made on page three of the permit, as well as in the Appendix U-1. Further, the word "engine" should be added to the description of the "CT startup diesel."

-XXX	CT startup diesel engine
-xxx	General purpose diesel engines (<32,000 gal/yr)
-xxx	Emergency generators (<32,000 gal/yr)
-XXX	General purpose painting (< 6 gal/month average)

In addition to the above, the following unregulated emission units should be included in Appendix U-1. These emission units have no "emissions-limiting pollutant" and no work practice standard but do have a general visible emission limitation of 20 percent.

-xxx Coal Processing and Conveying System, Coal Storage System, Coal Transfer and Loading System, Limestone Handling and Storage System , and Flyash Handling and Storage System

Exempt Units--"Mobile sources" were included in the exempt list. Lakeland requests that mobile sources be omitted from the Title V permit altogether since mobile sources are not regulated under the Title V permit program.

NSPS Emission Limit Terminology— for Emission Unit 005—In several areas of the Conditions for this emissions unit, fuels are mentioned that do not apply. In some cases the wording of the NSPS was modified to exclude these fuels. In Condition D.5. (1) the "or fossil fuel and wood residue" should be deleted. The equation in and legend in Condition D.10. should be modified to exclude lignite (w) and solid fossil fuel (z). The reference to solid fuel and combinations in the table and legend in Condition D.29. should be deleted.

Summary Table 2-1--Summary table 2-1 should be corrected to be consistent with the permit conditions; specifically:

- Clarify that each delivery of used oil is not required to be sampled and analyzed;
- Add a footnote explaining the purpose of the "frequency base dates" is a suggestion to conduct the annual testing within 90 days of the date listed;
- Clarify that compliance with the sulfur dioxide limit for Unit 005 (McIntosh Unit 2) can be accomplished using fuel sampling and analysis in lieu of a stack test, as authorized by the construction permit; and
- Clarify that NOx CEMs are not required for Unit 005 or 006 and that an SO2 CEM is not required for Unit 005.

Table 1-1-- for Emission Units 002 and 003--A footnote for this table should note that the Equivalent Emissions are for each unit. Additionally this table needs revision for the PSD Permit Conditions for emission unit 006.

General Conditions--Several conditions in TV-1 (the general conditions) should be identified as being "not federally enforceable." Further, Condition 58 regarding unconfined particulate matter emissions should be deleted since the facility-specific requirements were included in the facility section of the permit. Lakeland understands that the Department has to date been unwilling to make these changes. If the changes are made in the future, Lakeland requests that TV-1 be replaced with the more current version. Lakeland does not, by accepting a final permit with the current version of TV-1, acquiesce that any of the conditions are federally enforceable.

After you and your staff have reviewed and considered our comments, we would appreciate receiving a written response from you or your staff, such as draft "replacement" pages for the permit or a letter explaining the Department's position regarding these issues as soon as possible. We would also like to meet with you and your staff regarding these issues within the next two weeks or so. Thank you again for your continued cooperation. We look forward to hearing from you soon and continue to feel optimistic that all of these issues can be resolved without the need for a formal hearing. If you or your staff have any questions, please contact me at 941-499-6603.

Farzie Shelton

Environmental Coordinator

Howard L. Rhodes, DEP cc: Pat Comer, DEP OGC Scott M. Sheplak, DEP Edward Svec, DEP

Ronald Tomlin, Lakeland Angela Morrison, HGSS



Excellence Is Our Goal, Service Is Our Job

June 30, 1997

Farzie Shelton

ENVIRONMENTAL COORDINATOR, Ch E.

Clair H. Fancy, Chief Bureau of Air Regulation Florida Department of Environmental Protection Magnolia Park Courtyard Tallahassee, FL 32301

RE:

C.D. McIntosh, Jr. Power Plant

Draft Title V Permit No. 1050004-003-AV

Polk County, Florida

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E3. Startup: The only, fuels allowed to be burned are is propane. No. 2 fuel oil, natural gas. No. 6 fuel oil, coal, petroleum coke, refuse derived fuel, or any combination of these fuels.

Heat Input-Because the most accurate method of measuring the actual heat input is based on the heating value of the fuel used and fuel flow meter data, Lakeland requests that this be identified in the permit Conditions A1, D1, and E1 as the compliance method.

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Vendor Data--To clarify that not only may "vendor data" be used to determine compliance with the sulfur content limits but that Lakeland's own as-received data can be used for compliance purposes, Lakeland requests that language to this effect be added to Conditions A15, A20, B9, and C9.

A15. Sulfur Dioxide. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. . . .

A20. Sulfur Dioxide. . . . the permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery.

B9/C9. <u>Not federally enforceable</u>. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor <u>or the permittee</u> upon each fuel delivery.

ASTM Methods--The latest ASTM methods for determining sulfur content of fuel for Emission Unit 001 (Condition A.21), Emissions Units 002 and 003 (Condition B.12.) and Emission Unit 004 (Condition C.12.) were not cited. As of June 1997, the latest ASTM methods are: D2622-94 (instead of D2622-92) and D129-95 (instead of D129-91).

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- B Visible Emissions Testing-Annual. By this permit, annual emissions compliance testing for visible emissions is not required unless a unit operates more than 400 hours during the prior year, excluding periods of startup.
- Gas Turbine Description--The gas turbine has a "nominal nameplate rating" of 20 megawatts. Lakeland requests that the description be revised to delete any reference to a "maximum rated output" of 20 megawatts.

Gas Turbine Peaking Unit 1 consists of a gas turbine which drives a generator producing electrical power at a nominal nameplate rating maximum rated output of 20 megawatts.

Heat Input Rates for Diesel Engines and Gas Turbine--The appropriate capacity limitation on the gas turbine peaking unit and the diesel engine peaking units should be in terms of "heat input rate" rather than a "fuel consumption rate," Lakeland requests that Conditions B1 and C1 be changed accordingly. In addition, because the heat input rate correction curves for the gas turbine peaking units (EU ID No. 004) have previously been provided to the Department, Condition C1 should be revised to reflect the appropriate temperature and the "lower heating value" basis.

- B1. Permitted Capacity. The maximum <u>heat input firing</u> rate of each diesel engine peaking unit is <u>28 mmBtu/hour</u> 201.6 gallons per hour while firing No. 2 fuel oil.
- C1 Permitted Capacity. The maximum <u>heat input firing</u> rate of the turbine is <u>330 mmBtu/hour while firing natural</u> gas (lower heating value) and 320 mmBtu/hour while firing fuel oil (lower heating value) at 30 degrees F. 320 million cubic feet per hour when firing natural gas or 2,310 gallons per hour when firing No. 2 fuel oil.

C13/D35. Operating Rate during Testing.

- b. ... Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report consistent with the heat input curves previously submitted to the Department based on design conditions.
- The phrase "unless otherwise specified in the applicable standard" is not applicable to any of the emission limits under 40 CFR Part 60 Subpart D.
- #/3 NOx CEMS for Units 005 and 006-Because Units 005 and 006 (McIntosh Units 2 and 3) are not required to install and operate continuous emissions monitoring systems (CEMS) for nitrogen oxides (NOx) under the applicable New Source Performance Standard, Subpart D, Paragraph (3) of Condition D11 and E12 should be deleted. The initial compliance tests for these units indicated that

the NOx levels were less than seventy percent of the standard, and under 40 CFR 60.45(b)(3) NOx CEMS are therefore not required. Lakeland therefore requests that the NOx CEMS requirements in Conditions D11 and D12 be deleted, including the corresponding references to NOx under Condition D29, E29, and E31.

Compliance with SO2 Limit on Unit 005--In lieu of an annual stack test to determine compliance with the sulfur dioxide limit of 0.8 lb/mmBtu for Unit 005, the permittee is authorized by its construction permit to use fuel sampling and analysis. Lakeland requests that the draft Title V permit be revised to clearly authorize the use of fuel sampling and analysis to demonstrate compliance with the sulfur dioxide limit. In addition, because 40 CFR 60.45(b)(2) provides that units without a flue gas desulfurization system, such as Unit 005, are not required to install a CEM for sulfur dioxide and may instead use fuel sampling and analysis to determine compliance. Because a sulfur dioxide CEM is not required under Subpart D, Lakeland requests that Conditions D29, D30, and D31 be deleted and that D28 be revised to include only opacity.

- D17. The owner or operator shall determine compliance with the particulate matter, SO2, and NOx standards in 40 CFR 60.42, 60.43, and 60.44 as follows: . . .
- (4) Sulfur Dioxide. The permittee may demonstrate compliance with the sulfur dioxide emissions limit based on a fuel analysis provided by the vendor or the permittee upon each fuel delivery. Method 6 shall be used to determine the SO2 concentration. . . .
- D28. The owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, and oxygen.

Annual NOx Testing--Similar to the annual testing requirements for particulate matter, Lakeland requests that a new condition be added for Unit 005 to specify that annual NOx testing should be conducted on fuel oil if it has been used for more than 400 hours during the year, and otherwise it is to be conducted on natural gas. This will prevent the need to conduct duplicative testing on oil and gas, and clarify that the annual testing should be conducted using the worst-case fuel.

D__. By this permit, annual compliance testing for nitrogen oxides shall be conducted while firing fuel oil if it has been used for more than 400 hours during the prior year (other than during startup); otherwise, it shall be conducted while firing natural gas.

Performance/Compliance Testing--A portion of 40 CFR 60.8(c) should be included as part of Conditions D.16. and E.17. to indicate that periods of startup, shutdown and malfunction are not representative conditions for performance/compliance tests under 40 CFR 60.8. The Condition should state:

Operations during periods of startup, shutdown and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emissions limit during periods of startup, shutdown and malfunction be considered a violation of the applicable emission limit.

Excess Emissions Reports--Because Units 005 and 006 are "new" rather than "existing" emission units under Rule 62-296.405, Florida Administrative Code, the reporting requirements under paragraph (1) of that rule do not apply and Conditions D34 and E36 should be deleted. In addition, the excess emission reporting requirements under Conditions D32 and E34 should include a reference to 40 CFR 60.7(e), which allows less frequent reporting under certain circumstances.

D32/E34. . . . Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c). Less frequent reporting may be allowed under the provisions of 40 CFR 60.7(e).

#/8 Excess Emissions for New Units--Because Units 005 and 006 are "new" rather than "existing" emission units under Rule 62-210.700, paragraph (1) rather than paragraphs (2) and (3) of that rule apply. Conditions D6, D12, D13, E6, E13, and E14 should be revised accordingly.

PSD Permit Conditions--It appears that several of the applicable provisions from the recent revision to the Prevention of Significant Deterioration (PSD) permit for Unit 006 (McIntosh Unit 3) have not been included in the draft Title V permit. Lakeland suggests that the Department consider the December 11, 1995, revision to the PSD permit, a copy of which was included as part of the Title V application.

#200bjectionable Odor--Lakeland requests that the facility-wide Condition 2 regarding objectionable odor be identified as being "not federally enforceable."

- #2/ General Standard for VOCs--Lakeland requests that facility-wide condition 7 regarding procedures to minimize volatile organic compound (VOC) emissions be revised to clarify that containers "containing VOC materials" will be kept closed "when not in use" and delete the requirement to store such containers in "weather-tight buildings." A revision to the Title V application addressing this issue is attached as Attachment A.
 - 7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. . . . Containers containing VOC materials shall be kept closed when not in use and stored in weather tight buildings.
- General Particulate Matter Standards (Unconfined Emissions)--Lakeland will be forwarding to you in a separate submittal revising its list of reasonable precautions taken to minimize unconfined particulate matter emissions, and requests that the Department make corresponding changes to facility-wide Condition 8 upon receipt of this application modification.
- Relevant Documents on File With the Department-Lakeland requests that on page three of the permit, the Department include a reference to the supplemental information filed with the Department on May 7, 1997.

Unregulated Emissions Units and/or Activities--Because the general purpose diesel engines, emergency generators, and general purpose painting have been categorized as "unregulated" rather than "exempt," Lakeland requests that the usage limitations be deleted. This change should be made on page three of the permit, as well as in the Appendix U-1. Further, the word "engine" should be added to the description of the "CT startup diesel."

-xxx	CT startup diesel engine
-xxx	General purpose diesel engines (<32,000 gal/yr)
-xxx	Emergency generators (<32,000 gal/yr)
-xxx	General purpose painting (< 6 gal/month average)

In addition to the above, the following unregulated emission units should be included in Appendix U-1. These emission units have no "emissions-limiting pollutant" and no work practice standard but do have a general visible emission limitation of 20 percent.

-xxx Coal Processing and Conveying System, Coal Storage System, Coal Transfer and Loading System, Limestone Handling and Storage System , and Flyash Handling and Storage System

#J5 Exempt Units--"Mobile sources" were included in the exempt list. Lakeland requests that mobile sources be omitted from the Title V permit altogether since mobile sources are not regulated under the Title V permit program.

NSPS Emission Limit Terminology-- for Emission Unit 005--In several areas of the Conditions for this emissions unit, fuels are mentioned that do not apply. In some cases the wording of the NSPS was modified to exclude these fuels. In Condition D.5. (1) the "or fossil fuel and wood residue" should be deleted. The equation in and legend in Condition D.10. should be modified to exclude lignite (w) and solid fossil fuel (z). The reference to solid fuel and combinations in the table and legend in Condition D.29. should be deleted that

#27 Summary Table 2-1--Summary table 2-1 should be corrected to be consistent with the permit conditions; specifically:

- Clarify that each delivery of used oil is not required to be sampled and analyzed;
- Add a footnote explaining the purpose of the "frequency base dates" is a suggestion to conduct the annual testing within 90 days of the date listed;
- Clarify that compliance with the sulfur dioxide limit for Unit 005 (McIntosh Unit 2) can be accomplished using fuel sampling and analysis in lieu of a stack test, as authorized by the construction permit; and
- Clarify that NOx CEMs are not required for Unit 005 or 006 and that an SO2 CEM is not required for Unit 005.

#28 Table 1-1-- for Emission Units 002 and 003--A footnote for this table should note that the Equivalent Emissions are for each unit. Additionally this table needs revision for the PSD Permit Conditions for emission unit 006.

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General Conditions--Several conditions in TV-1 (the general conditions) should be identified as being "not federally enforceable." Further, Condition 58 regarding unconfined particulate matter emissions should be deleted since the facility-specific requirements were included in the facility section of the permit. Lakeland understands that the Department has to date been unwilling to make these changes. If the changes are made in the future, Lakeland requests that TV-1 be replaced with the more current version. Lakeland does not, by accepting a final permit with the current version of TV-1, acquiesce that any of the conditions are federally enforceable.

After you and your staff have reviewed and considered our comments, we would appreciate receiving a written response from you or your staff, such as draft "replacement" pages for the permit or a letter explaining the Department's position regarding these issues as soon as possible. We would also like to meet with you and your staff regarding these issues within the next two weeks or so. Thank you again for your continued cooperation. We look forward to hearing from you soon and continue to feel optimistic that all of these issues can be resolved without the need for a formal hearing. If you or your staff have any questions, please contact me at 941-499-6603.

Sincerely,

Farzie Shelton

Environmental Coordinator

cc: Howard L. Rhodes, DEP
Pat Comer, DEP OGC
Scott M. Sheplak, DEP
Edward Svec, DEP
Ronald Tomlin, Lakeland
Angela Morrison, HGSS

Excellence Is Our Goal, Service Is Our Job

Farzie Shelton

ENVIRONMENTAL COORDINATOR, Ch E.

May 7, 1997

RECEIVED

MAY 0 9 1997

BUREAU OF AIR REGULATION

Clair H. Fancy, P.E. Chief, Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Road, MS 5505 Tallahassee, FL 32301

RE:

Lakeland Electric and Water Utilities C. D. McIntosh Jr. Power Plant File No. 1050004-003-AV

Dear Clair:

we are enclosing revisions to the Title V permit application for the C.D. McIntosh Jr. Power Plant regarding the Continuous Emission Monitoring System (CEMS) for the Emission Units 005 and 006 (Units No. 2 and No. 3 respectively). Therefore, please find enclosed an original and three copies of new "segment" pages 31 for Continuous Monitor Information for SO₂, CO₂, and Flow. These changes are due to utilizing 40 CFR Part 75 (Acid Rain) CEMS to meet the CEMS requirements of the New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart D. This submittal has been signed and sealed by Mr. Ken Kosky, P.E. of Golder Associates, Inc. and certified by our Responsible Official Mr. Ronald W. Tomlin, Assistant Managing Director.

If you should have any questions, please do not hesitate to contact me at (941) 499-6603.

Sincerely

Farzie Shelton

Environmental Division

Enc.

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:

Ronald W. Tomlin, Assistant Managing Director

2. Owner/Authorized Representative or Responsible Official Mailing Address:

Organization/Firm: Lakeland Electric & Water Utilities

Street Address: 501 East Lemon Street

State: FL Zip Code: City: Lakeland 33801-5079

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:

Telephone:

(941) 499-6300

(941) 499-6344

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative * of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.

Signature

Date

* Attach letter of authorization if not currently on file.

4. Professional Engineer's Statement:

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

- (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
- (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

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

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

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

Signature, Date

Attach any exception to certification statement.

DEP, Form No. 62.210.900(1) - Form

Effective: 03-21-96

4/9/97

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Emissions Unit Information Section	_	of	•	

	Parameter Code: EM	2. Pollutant(s):	SO2
	CMS Requirement: [x] Rule []	Other	
1.	Monitor Information: Monitor Manufacturer: Advanced Pollu Model Number: 152	tion Inst. Serial Number: 170	
5.	Installation Date: 14 Dec 1994		
6.	Performance Specification Test Date:	10 Nov 1995	
	CEM required pursuant to 40 CFR Par	t 75. Required pursuant to	40 CFR 60.45.
<u>n</u> 1	tinuous Monitoring System Continuou	as Monitor 2 of 5	
		as Monitor 2 of 5 2. Pollutant(s):	NOX
1.	- 	2. Pollutant(s):	- NOX
3.	Parameter Code: EM CMS Requirement: [x] Rule []	2. Pollutant(s): Other	
1.	Parameter Code: EM CMS Requirement: [X] Rule [] Monitor Information: Monitor Manufacturer: Advanced Poll Model Number: 252	2. Pollutant(s): Other ution Inst.	
1 . 3 . 4 .	Parameter Code: EM CMS Requirement: [X] Rule [] Monitor Information: Monitor Manufacturer: Advanced Poll Model Number: 252 Installation Date: 14 Dec 1994	2. Pollutant(s): Other ution Inst. Serial Number: 139	

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Emissions Unit Information Section		of	

Cont	inuous Monitoring System Continuou	s Monitor 3 of 5
1.	Parameter Code: VE	2. Pollutant(s):
3.	CMS Requirement: [x] Rule []	Other
4.	Monitor Information: Monitor Manufacturer: United Science Model Number: 500C	s Inc. Serial Number: 0993687
5.	Installation Date: 14 Dec 1994	
6.	Performance Specification Test Date:	-
7.	Continuous Monitor Comment (limit to COM required pursuant to 40 CFR Par	o 200 characters): t 75. Required pursuant to 40 CFR 60.45.
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	Parameter Code: CO2 CMS Requirement: [x] Rule []	
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5.	Installation Date: 14 Dec 1994	
6.	Performance Specification Test Date:	
7.	Continuous Monitor Comment (limit t	,

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Emissions Unit Information Section		of	

Cont	inuous Monitoring System Continuou	s Monitor <u>5</u> of <u>5</u>
1.	Parameter Code: FLOW	2. Pollutant(s):
3.	CMS Requirement: [x] Rule []	Other
4.	Monitor Information: Monitor Manufacturer: Air Monitor Model Number: CEM	Serial Number: 6232D
5.	Installation Date: 14 Dec 1994	
6.	Performance Specification Test Date:	10 Nov 1995
7.	Continuous Monitor Comment (limit to FLOW monitor required pursuant to 4	•
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3.	CMS Requirement: [] Rule []	Other
4.	Monitor Information: Monitor Manufacturer: Model Number:	Serial Number:
5.	Installation Date:	
6.	Performance Specification Test Date:	
7.	Continuous Monitor Comment (limit t	o 200 characters):

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1. Parameter Code: EM 2. Pollutant(s): NOX 3. CMS Requirement: [x] Rule [] Other 4. Monitor Information: Monitor Manufacturer: Advanced Pollution Inst. Model Number: 252 Serial Number: 165 5. Installation Date: 09 Nov 1994 6. Performance Specification Test Date: 01 Dec 1995 7. Continuous Monitor Comment (limit to 200 characters):	ont	inuous Monitoring System Continuol	is Monitor of	-
4. Monitor Information: Monitor Manufacturer: Advanced Pollution Inst. Model Number: 152 Serial Number: 172 5. Installation Date: 09 Nov 1994 6. Performance Specification Test Date: 01 Dec 1995 7. Continuous Monitor Comment (limit to 200 characters): CEM required pursuant to 40 CFR Part 75; PSD-FL-008. Required pursuant to 40 CFR 60.45. ontinuous Monitoring System Continuous Monitor 2 of 5 1. Parameter Code: EM 2. Pollutant(s): NOX 3. CMS Requirement: [x] Rule [] Other 4. Monitor Information: Monitor Manufacturer: Model Number: 252 Serial Number: 165 5. Installation Date: 09 Nov 1994 6. Performance Specification Test Date: 01 Dec 1995 7. Continuous Monitor Comment (limit to 200 characters):	1.	Parameter Code: EM	2. Pollutant(s):	SO2
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6. Per 7. Co	rformance Specification Test Date ontinuous Monitor Comment (limit COM required pursuant to 40 CFR P 50.45.	to 200 characters):
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4. Mo	onitor Information:	nalytical Inst. Serial Number: N3L2487T
5. Ins	stallation Date: 09 Nov 1994	
6. Pe	erformance Specification Test Date	01 Dec 1995
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1.	Parameter Code: FLOW	2. Pollutant(s):		
3.	CMS Requirement: [x] Rule []	Other		
4.	Monitor Information: Monitor Manufacturer: Air Monitor Model Number: CEM	Serial Number: 6233D		
5.	Installation Date: 09 Nov 1994			
6.	Performance Specification Test Date:	10 Nov 1995		
7.	Continuous Monitor Comment (limit to FLOW monitor required pursuant to 4	,		
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5.	Installation Date:			
6.	Performance Specification Test Date:	·		
7.	Continuous Monitor Comment (limit t	o 200 characters):		

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official: Ronald W. Tomlin, Assistant Managing Director 2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Lakeland Electric & Water Utilities Street Address: 501 East Lemon Street City: Lakeland State: FL Zip Code: 33801-5079 3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (941) 499-6300 Fax: (941) 499-6344 4. Owner/Authorized Representative or Responsible Official Statement: I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.					
2. Owner/Authorized Representative or Responsible Official Mailing Address: Street Address: 501 East Lemon Street City: Lakeland State: FL Zip Code: 33801-5079 3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (941) 499-6300 Fax: (941) 499-6344 4. Owner/Authorized Representative or Responsible Official Statement: I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.	1.	Name and Title of Owner/Authoriz	ed Representa	tive	or Responsible Official:
Street Address: 501 East Lemon Street City: Lakeland State: FL Zip Code: 33801-5079 3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (941) 499-6300 Fax: (941) 499-6344 4. Owner/Authorized Representative or Responsible Official Statement: I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.		Ronald W. Tomlin, Assistant Manag	ging Director		
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Telephone: (941) 499-6300 Fax: (941) 499-6344 4. Owner/Authorized Representative or Responsible Official Statement: I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.		City: Lakeland	State:	FL	Zip Code: 33801-5079
4. Owner/Authorized Representative or Responsible Official Statement: I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.	3.	Owner/Authorized Representative	or Responsibl	e Off	icial Telephone Numbers:
I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.		Telephone: (941) 499-6300]	Fax:	(941) 499-6344
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		defined in Rule 62-210.200, F.A.C application, whichever is applicable belief formed after reasonable inquire true, accurate and complete at of emissions reported in this applicalculating emissions. The air poly equipment described in this applicable standathe statutes of the State of Floridal Protection and revisions thereof. Department, cannot be transferred will promptly notify the Department emissions unit.	C., of the Title ole. I hereby on that the number of the that, to the cation are backet and rules of I understand without authout upon sale of the control of the topon sale of the control of the topon sale of the control of the con	V so certify state best sed u opera l of a the D that a oriza or leg	urce addressed in this by, based on information and ments made in this application of my knowledge, any estimates upon reasonable techniques for inits and air pollution control ated and maintained so as to air pollutant emissions found in Department of Environmental a permit, if granted by the ation from the Department, and I wall transfer of any permitted
		Signature		Da	ie

^{*} Attach letter of authorization if not currently on file.

4. Professional Engineer's Statement:

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

- (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
- (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

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

Signature, Date

Attachany exception to certification statement.

P. Form No. 62.210.900(1) - Form

Effective: 03-21-96

4/9/97

14262Y/F3/TVAI

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Emissions Unit Information Section	_	of	•	

1.	Parameter Code: EM	2. Pollutant(s):	SO2
3.	CMS Requirement: [x] Rule []	Other	
4.	Monitor Information: Monitor Manufacturer: Advanced Pollu Model Number: 152	stion Inst. Serial Number: 170	
5.	Installation Date: 14 Dec 1994		
6.	Performance Specification Test Date:	10 Nov 1995	-
7.	Continuous Monitor Comment (limit to CEM required pursuant to 40 CFR Par	,	CFR 60.45.
ont	tinuous Monitoring System Continuou	us Monitor2 of5	
	Parameter Code: EM	2. Pollutant(s):	NOX
	Parameter Code: EM	2. Pollutant(s):	NOX
1. 3.	Parameter Code: EM	2. Pollutant(s): Other	NOX
1. 3.	Parameter Code: EM CMS Requirement: [X] Rule [] Monitor Information: Monitor Manufacturer: Advanced Political Number: 252	2. Pollutant(s): Other	NOX
1. 3. 4.	Parameter Code: EM CMS Requirement: [X] Rule [] Monitor Information: Monitor Manufacturer: Advanced Political Number: 252	2. Pollutant(s): Other lution Inst. Serial Number: 139	NOX

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Emissions Unit Information Section		of	

Conti	Continuous Monitoring System Continuous Monitor 3 of 5			
1.	Parameter Code: VE	2. Pollutant(s):		
3.	CMS Requirement: [x] Rule []	Other		
4.	Monitor Information: Monitor Manufacturer: United Science: Model Number: 500C	s Inc. Serial Number: 0993687		
5.	Installation Date: 14 Dec 1994			
6.	Performance Specification Test Date:			
7.	Continuous Monitor Comment (limit to	200 characters):		
	COM required pursuant to 40 CFR Par	t 75. Required pursuant to 40 CFR 60.45.		
<u>Cont</u>	inuous Monitoring System Continuo	ns Monitor4 of5		
1.	Parameter Code: CO2	2. Pollutant(s):		
3.	CMS Requirement: [x] Rule []	Other		
4.	Monitor Information: Monitor Manufacturer: California Ana	lytical Inst.		
	Model Number: 3300	Serial Number: N3K4430T		
5.	Installation Date: 14 Dec 1994			
6.	Performance Specification Test Date:			
7.	7. Continuous Monitor Comment (limit to 200 characters):			
,	CEM required pursuant to 40 CFR Part 75	5.		
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Emissions Unit Information Section		of	

Cont	inuous Monitoring System Continuou	s Monitor <u>5</u> of <u>5</u>
1.	Parameter Code: FLOW	2. Pollutant(s):
3.	CMS Requirement [x] Rule []	Other
4.	Monitor Information: Monitor Manufacturer: Air Monitor Model Number: CEM	Serial Number: 6232D
5.	Installation Date: 14 Dec 1994	
6.	Performance Specification Test Date:	10 Nov 1995
7.	Continuous Monitor Comment (limit to FLOW monitor required pursuant to 4	,
Cont	inuous Monitoring System Continuou	
1.	Parameter Code:	2. Pollutant(s):
3.	CMS Requirement: [] Rule []	Other
4.	Monitor Information: Monitor Manufacturer: Model Number:	Serial Number:
5.	Installation Date:	·
6.	Performance Specification Test Date:	
7.	Continuous Monitor Comment (limit t	o 200 characters):

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Emissions Unit Information Section		of	

Cont	indus Monitoring System Continuou				
1.	Parameter Code: EM	2. Pollutant(s):	SO2		
3.	CMS Requirement: [x] Rule []	Other			
4.	Monitor Information: Monitor Manufacturer: Advanced Pollu Model Number: 152	stion Inst. Serial Number: 172			
5.	Installation Date: 09 Nov 1994				
6.	Performance Specification Test Date:	01 Dec 1995			
7.	Continuous Monitor Comment (limit to	o 200 characters):			
	CEM required pursuant to 40 CFR Part 60.45.	t 75; PSD-FL-008. Required pur	suant to 40 CFR		
<u>Cont</u>	inuous Monitoring System Continuou	us Monitor of5			
1.	Parameter Code: EM	2. Pollutant(s):	NOX		
3.	CMS Requirement: [x] Rule []	Other			
4.	Monitor Information: Monitor Manufacturer: Advanced Poll Model Number: 252	lution Inst. Serial Number: 165			
5.	Installation Date: 09 Nov 1994				
6.	Performance Specification Test Date: 01 Dec 1995				
7.	7. Continuous Monitor Comment (limit to 200 characters):				
	CEM required pursuant to 40 CFR Part 75; PSD-FL-008.				
		•			

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missions	Unit	Information	Section		of	-

Conti	Continuous Monitoring System Continuous Monitor 3 of 5				
1.	Parameter Code: VE	2. Pollutant(s):			
3.	CMS Requirement: [x] Rule []	Other			
4.	Monitor Information: Monitor Manufacturer: United Science Model Number: 500C	s Inc. Serial Number: 0993688			
5.	Installation Date: 09 Nov 1994				
6.	Performance Specification Test Date:	01 Dec 1995			
7.	Continuous Monitor Comment (limit to	o 200 characters):			
	COM required pursuant to 40 CFR Par 60.45.	t 75; PSD-FL-008. Required pursuant to 40 CFR			
Cont	inuous Monitoring System Continuou	us Monitor4 of5			
1.	Parameter Code: CO2	2. Pollutant(s):			
3.	CMS Requirement: [x] Rule []	Other			
4.	Monitor Information: Monitor Manufacturer: California Ana Model Number: 3300	lytical Inst. Serial Number: N3L2487T			
5.	Installation Date: 09 Nov 1994				
6.	Performance Specification Test Date:	01 Dec 1995			
7.	Continuous Monitor Comment (limit t	o 200 characters):			
(CEM required pursuant to 40 CFR Part 75				

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Emissions Unit Information Section		of	-

Continuous Monitoring System Continuous Monitor 5 of 5				
1.	Parameter Code: FLOW	2. Pollutant(s):		
3.	CMS Requirement: [x] Rule []	Other		
4.	Monitor Information: Monitor Manufacturer: Air Monitor Model Number: CEM	Serial Number: 6233D		
5.	Installation Date: 09 Nov 1994			
6.	Performance Specification Test Date:	10 Nov 1995		
7.	7. Continuous Monitor Comment (limit to 200 characters): FLOW monitor required pursuant to 40 CFR Part 75			
Continuous Monitoring System Continuous Monitor of				
1.	Parameter Code:	2. Pollutant(s):		
3.	CMS Requirement: [] Rule []	Other		
4.	Monitor Information: Monitor Manufacturer: Model Number:	Serial Number:		
5.	Installation Date:			
6.	Performance Specification Test Date:			
7.	Continuous Monitor Comment (limit to	o 200 characters):		

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official:

Ronald W. Tomlin, Assistant Managing Director

2. Owner/Authorized Representative or Responsible Official Mailing Address:

Organization/Firm: Lakeland Electric & Water Utilities

Street Address: 501 East Lemon Street

City: Lakeland

State: FL

Zip Code:

33801-5079

3. Owner/Authorized Representative or Responsible Official Telephone Numbers:

Telephone:

(941) 499-6300

Fax:

(941) 499-6344

4. Owner/Authorized Representative or Responsible Official Statement:

I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.

Ronald W. Tomber

Signature

* Attach letter of authorization if not currently on file.

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- (1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
- (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

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Signature"

Date

9 April 1997

Aftachany exception to certification statement.

DEP'Form No. 62.210.900(1) - Form

Effective: 03-21-96

4/9/97

14262Y/F3/TVAI

Emissions	Unit Info	rmation	Section

FFFSG Unit 2

J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Continuous Monitoring System Continuous Monitor 1 of 5				
1.	Parameter Code: EM	2. Pollutant(s): SO2		
3.	CMS Requirement: [x] Rule []	Other		
4.	Monitor Information: Monitor Manufacturer: Advanced Pollu Model Number: 152	tion Inst. Serial Number: 170		
5.	Installation Date: 14 Dec 1994			
6.	Performance Specification Test Date:	10 Nov 1995		
7.	7. Continuous Monitor Comment (limit to 200 characters): CEM required pursuant to 40 CFR Part 75. Required pursuant to 40 CFR 60.45.			
Continuous Monitoring System Continuous Monitor 2 of 5				
1.	Parameter Code: EM	2. Pollutant(s): NOX		
3.	CMS Requirement: [x] Rule []	Other		
4.	Monitor Information: Monitor Manufacturer: Advanced Poll Model Number: 252	ution Inst. Serial Number: 139		
5.	Installation Date: 14 Dec 1994			
6.	Performance Specification Test Date:	10 Nov 1995		
7.	Continuous Monitor Comment (limit to CEM required pursuant to 40 CFR Part 75)	•		

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

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Emissions Unit Information Section	_	of	•

Continuous Monitoring System Continuous Monitor 3 of 5				
1.]	Parameter Code: VE	2. Pollutant(s):		
3.	CMS Requirement: [x] Rule []	Other		
]	Monitor Information: Monitor Manufacturer: United Science : Model Number: 500C	s Inc. Serial Number: 0993687		
5.]	Installation Date: 14 Dec 1994			
6.	Performance Specification Test Date:			
7. (7. Continuous Monitor Comment (limit to 200 characters): COM required pursuant to 40 CFR Part 75. Required pursuant to 40 CFR 60.45.			
Continuous Monitoring System Continuous Monitor 4 of 5				
1.	Parameter Code: co2	2. Pollutant(s):		
3.	CMS Requirement: [x] Rule []	Other		
	Monitor Information: Monitor Manufacturer: California Ana Model Number: 3300	lytical Inst. Serial Number: N3K4430T		
5.	Installation Date: 14 Dec 1994			
6.	Performance Specification Test Date:			
	Continuous Monitor Comment (limit t	,		

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Emissions Unit Information Section	_	of	•

Continuous Monitoring System Continuous Monitor 5 of 5			
1.	Parameter Code: FLOW	2. Pollutant(s):	
3.	CMS Requirement: [x] Rule []	Other	
4.	Monitor Information: Monitor Manufacturer: Air Monitor Model Number: CEM	Serial Number: 6232D	
5.	Installation Date: 14 Dec 1994		
6.	Performance Specification Test Date:	10 Nov 1995	
7.	Continuous Monitor Comment (limit to FLOW monitor required pursuant to 4	·	
Cont	inuous Monitoring System Continuou	us Monitor of	
1.	Parameter Code:	2. Pollutant(s):	
3.	CMS Requirement: [] Rule []	Other	
4.	Monitor Information: Monitor Manufacturer: Model Number:	Serial Number:	
5.	Installation Date:		
6.	Performance Specification Test Date:	J	
7.	Continuous Monitor Comment (limit t	o 200 characters):	

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Emissions	Unit Information Section	_	of	•	

Continuous Monitoring System Continuous Monitor 1 of 5				
1.	Parameter Code: EM	2. Pollutant(s):	6O2	
3.	CMS Requirement: [x] Rule []	Other		
4.	Monitor Information: Monitor Manufacturer: Advanced Pollu Model Number: 152	stion Inst. Serial Number: 172		
5.	Installation Date: 09 Nov 1994	· · · · · · · · · · · · · · · · · · ·		
6.	Performance Specification Test Date:	01 Dec 1995		
7.	Continuous Monitor Comment (limit to	o 200 characters):		
	CEM required pursuant to 40 CFR Part 60.45.	t 75; PSD-FL-008. Required pursua	ant to 40 CFR	
	•			
Cont	Continuous Monitoring System Continuous Monitor 2 of 5			
1.	Parameter Code: EM	2. Pollutant(s):	OX	
3.	CMS Requirement: [X] Rule []	Other		
4.	Monitor Information: Monitor Manufacturer: Advanced Poll Model Number: 252	lution Inst. Serial Number: 165		
5.	Installation Date: 09 Nov 1994			
6.	Performance Specification Test Date:	01 Dec 1995		
7.	Continuous Monitor Comment (limit t	o 200 characters):		
	CEM required pursuant to 40 CFR Part 75	5; PSD-FL-008.		

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Emissions Unit Information Section	•	of	•

Cont	Continuous Monitoring System Continuous Monitor 3 of 5				
1.	Parameter Code: VE	2. Pollutant(s):			
3.	CMS Requirement: [x] Rule [] Other				
4.	Monitor Information: Monitor Manufacturer: United Sciences Inc. Model Number: 500C Serial Number: 0993688				
5.	Installation Date: 09 Nov 1994				
6.	Performance Specification Test Date:	01 Dec 1995			
7.	Continuous Monitor Comment (limit to	o 200 characters):			
	COM required pursuant to 40 CFR Par 60.45.	t 75; PSD-FL-008. Required pursuant to 40 CFR			
Cont	inuous Monitoring System Continuou	us Monitor of			
1.	Parameter Code: CO2	2. Pollutant(s):			
3.	CMS Requirement: [x] Rule []	Other			
4.	Monitor Information: Monitor Manufacturer: California Ana	lytical Inst.			
	Monitor Manufacturer: California Ana Model Number: 3300	Serial Number: N3L2487T			
5.	Installation Date: 09 Nov 1994				
6.	Performance Specification Test Date: 01 Dec 1995				
7.	Continuous Monitor Comment (limit t	o 200 characters):			
	CEM required pursuant to 40 CFR Part 7	5			
		•			

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Emissions Unit Information Section		of	

J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Cont	inuous Monitoring System Continuou	is Monitor <u>5</u> of <u>5</u>	
1.	Parameter Code: FLOW	2. Pollutant(s):	
3.	CMS Requirement: [x] Rule []	Other	
4.	Monitor Information: Monitor Manufacturer: Air Monitor Model Number: CEM	Serial Number: 6233D	
5.	Installation Date: 09 Nov 1994		
6.	Performance Specification Test Date:	10 Nov 1995	
7.	Continuous Monitor Comment (limit to FLOW monitor required pursuant to 4	·	
Cont	inuous Monitoring System Continuou	us Monitor of	
1.	Parameter Code:	2. Pollutant(s):	
3.	CMS Requirement: [] Rule []	Other	
4.	Monitor Information: Monitor Manufacturer: Model Number:	Serial Number:	
5.	Installation Date:		
6.	Performance Specification Test Date:		
7.	Continuous Monitor Comment (limit t	o 200 characters):	

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

Owner/Authorized Representative or Responsible Official

1.	Name and Title of Owner/Authorized Representative or Responsible Official:		
	Ronald W. Tomlin, Assistant Managing Director		
2.	Owner/Authorized Representative or Responsible Official Mailing Address:		
_	ganization/Firm: Lakeland Electric & Water Utilities Street Address: 501 East Lemon Street City: Lakeland State: FL Zip Code: 33801-5079		
3.	Owner/Authorized Representative or Responsible Official Telephone Numbers:		
	Telephone: (941) 499-6300 Fax: (941) 499-6344		
4.	Owner/Authorized Representative or Responsible Official Statement:		
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	Ronald W. Torne 5-7-97		
	Signature Date		

* Attach letter of authorization if not currently on file.

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DEP Form No. 62.210.900(1) - Form

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Signature ...

Date

9 April 97

Attack any exception to certification statement.

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DEP Form No. 62.210.900(1) - Form

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Emissions Unit	t Information	Section	_	of	

<u>ont</u>	inuous Monitoring System Continuou	is Monitor or			
1.	Parameter Code: EM	2. Pollutant(s):	SO2		
3.	CMS Requirement: [x] Rule []	Other			
4.	Monitor Information: Monitor Manufacturer: Advanced Pollu Model Number: 152	ition Inst. Serial Number: 170			
5.	Installation Date: 14 Dec 1994				
6.	Performance Specification Test Date:	10 Nov 1995			
7.	7. Continuous Monitor Comment (limit to 200 characters): CEM required pursuant to 40 CFR Part 75. Required pursuant to 40 CFR 60.45.				
Cont	inuous Monitoring System Continuou	us Monitor 2 of 5			
1.	Parameter Code: EM	2. Pollutant(s):	NOX		
3.	CMS Requirement: [X] Rule []	Other			
4.	Monitor Information: Monitor Manufacturer: Advanced Pollution Inst. Model Number: 252 Serial Number: 139				
5.	Installation Date: 14 Dec 1994				
6.	6. Performance Specification Test Date: 10 Nov 1995				
7.	Continuous Monitor Comment (limit t	ŕ			

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Emissions	Unit	Information	Section		ot	

Cont	Continuous Monitoring System Continuous Monitor 3 of 5				
1.	Parameter Code: VE	2. Pollutant(s):			
3.	CMS Requirement: [x] Rule []	Other			
4.	Monitor Information: Monitor Manufacturer: United Sciences Inc. Model Number: 500C Serial Number: 0993687				
5.	Installation Date: 14 Dec 1994				
6.	Performance Specification Test Date:				
7.	Continuous Monitor Comment (limit to COM required pursuant to 40 CFR Par	o 200 characters): t 75. Required pursuant to 40 CFR 60.45.			
Cont	inuous Monitoring System Continuou	us Monitor 4 of 5			
1.	Parameter Code: CO2	2. Pollutant(s):			
3.	CMS Requirement: [x] Rule []	Other			
4.	Monitor Information: Monitor Manufacturer: California Ana Model Number: 3300	llytical Inst. Serial Number: N3K4430T			
5.	Installation Date: 14 Dec 1994				
6.	Performance Specification Test Date:				
7.	7. Continuous Monitor Comment (limit to 200 characters):				
	CEM required pursuant to 40 CFR Part 7	5.			
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Emissions Unit Information	Section	_	of	•

Cont	Continuous Monitoring System Continuous Monitor 5 of 5			
1.	Parameter Code: FLOW	2. Pollutant(s):		
3.	CMS Requirement: [x] Rule []	Other		
4.	Monitor Information: Monitor Manufacturer: Air Monitor Model Number: CEM	Serial Number: 6232D		
5.	Installation Date: 14 Dec 1994			
6.	Performance Specification Test Date:	10 Nov 1995		
7.	Continuous Monitor Comment (limit to FLOW monitor required pursuant to 40	,		
	inuous Monitoring System Continuou			
1.	Parameter Code:	2. Pollutant(s):		
3.	CMS Requirement: [] Rule []	Other		
4.	Monitor Information: Monitor Manufacturer: Model Number:	Serial Number:		
5.	Installation Date:	·		
6.	Performance Specification Test Date:			
7.	Continuous Monitor Comment (limit to	o 200 characters):		

			3	7
Emissions	Unit Inform	ation Section	ı of	•

Cont	inuous Monitoring System Continuou	s Monitor 1 of 5	
1.	Parameter Code: EM	2. Pollutant(s): SO2	
3.	CMS Requirement: [x] Rule []	Other	
4.	Monitor Information: Monitor Manufacturer: Advanced Pollution Inst. Model Number: 152 Serial Number: 172		
5.	Installation Date: 09 Nov 1994		
6.	Performance Specification Test Date:	01 Dec 1995	
7.	Continuous Monitor Comment (limit to	o 200 characters):	
	CEM required pursuant to 40 CFR Par 60.45.	t 75; PSD-FL-008. Required pursuant to 40 CFR	
Cont	inuous Monitoring System Continuou	us Monitor2 of5	
1.	Parameter Code: EM	2. Pollutant(s): NOX	
3.	CMS Requirement: [x] Rule []	Other	
4.	Monitor Information: Monitor Manufacturer: Advanced Pollution Inst. Model Number: 252 Serial Number: 165		
5.	Installation Date: 09 Nov 1994		
6.	Performance Specification Test Date: 01 Dec 1995		
7.	Continuous Monitor Comment (limit t	o 200 characters):	
	CEM required pursuant to 40 CFR Part 75	5; PSD-FL-008.	

	3	7
Emissions Unit Information Section	ion of	•

FFFSG Unit 3

J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Conti	Continuous Monitoring System Continuous Monitor or								
1.	Parameter Code: VE	2. Pollutant(s):							
3.	CMS Requirement: [x] Rule [] Other								
4.	 4. Monitor Information: Monitor Manufacturer: United Sciences Inc. Model Number: 500C								
5.	Installation Date: 09 Nov 1994								
6.	Performance Specification Test Date:	01 Dec 1995							
7.	7. Continuous Monitor Comment (limit to 200 characters): COM required pursuant to 40 CFR Part 75; PSD-FL-008. Required pursuant to 40 CFR 60.45.								
Cont	inuous Monitoring System Continuou	us Monitor 4 of 5							
1.	Parameter Code: CO2	2. Pollutant(s):							
3.	CMS Requirement: [x] Rule []	Other							
4.	Monitor Information: Monitor Manufacturer: California Ana Model Number: 3300	lytical Inst. Serial Number: N3L2487T							
5.	Installation Date: 09 Nov 1994	-							
6.	Performance Specification Test Date:	01 Dec 1995							
7.									

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Emissions Unit Information Section		of	

FFFSG Unit 3

J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Conti	Continuous Monitoring System Continuous Monitor 5 of 5								
1.	Parameter Code: FLOW	2. Pollutant(s):							
3.	CMS Requirement: [x] Rule []	Other							
4.	4. Monitor Information: Monitor Manufacturer: Air Monitor Model Number: CEM Serial Number: 6233D								
5.	. Installation Date: 09 Nov 1994								
6.	Performance Specification Test Date: 10 Nov 1995								
7.	Continuous Monitor Comment (limit to	o 200 characters):							
	FLOW monitor required pursuant to 4	0 CFR Part 75							
Cont	inuous Monitoring System Continuou	us Monitor of							
1.	Parameter Code:	2. Pollutant(s):							
3.	CMS Requirement: [] Rule []	Other							
4.	Monitor Information: Monitor Manufacturer: Model Number:	Serial Number:							
5.	Installation Date:								
6.	Performance Specification Test Date:								
7.	Continuous Monitor Comment (limit t	o 200 characters):							

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

Effective: 03-21-96

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

FINAL Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No. Brief Description

[-001] McIntosh Unit 1 - Fossil Fuel Fired Steam Generator

			Allowable Emissions			Equivalent Emis	sions*		
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour	TPY	lbs:/hour	TPY	Regulatory Citation(s)	See permit condition(s)
VE	All	8,760	20% w/ 40% for 2 min/hr					62-296.405(1)(a),FAC	III.A.5.
VE	All		60% 3 hrs/24 hrs					62-210.700(3),FAC	III.A.6.
PM	Gas	8,760	0.1 lb/MMBtu			98.5	431.4	62-296.405(1)(b),FAC	III.A.7.
PM	Oil	8,760	0.1 lb/MMBtu			95.0	416,1	62-296.405(1)(b),FAC	III.A.7.
PM	Gas	1,095	0.3 lb/MMBtu			295.5	161.8	62-210.700(3),FAC	III.A.8.
PM	Oil	1,095	0.3 lb/MMBtu	 		285.0	156.0	62-210.700(3),FAC	III.A.8.
SO ₂	Oil	8,760	2.75 lb/MMBtu			2,612.5	11,442.8	62-296.405(1)(c)1.j.,FAC	III.A.9.
SO ₂	Oil	8,760	2.5% S by weight			2,612.5	11,442.8	AO 53-243945	III.A.10.
Arsenic	Used Oil	\	5 ppm (42,000 gal/yr)				0.0008	AO 53-243945	III.A.11.
Cadmium	Used Oil		2 ppm (42,000 gal/yr)				0.0003	AO 53-243945	III.A.11.
Chromium	Used Oil		10 ppm (42,000 gal/yr)				0.0017	AO 53-243945	III.A.11.
Lead	Used Oil		100 ppm (42,000 gal/yr)				0.017	AO 53-243945	III.A.11.
Total Halogens	Used Oil		1,000 ppm (42,000 gal/yr)				0.17	AO 53-243945	III.A.11.
PCBs	Used Oil		<50 ppm (42,000 gal/yr)				0.0084	AO 53-243945	III.A.11.
					·				

Notes

^{*} The "Equivalent Emissions" listed are for informational purposes only.

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

FINAL Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No. Brief Description

[-002] Diesel Engine Peaking Unit 2
[-003] Diesel Engine Peaking Unit 3

			Allowable Emissions			Equivalent Emiss	ions*		
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour	TPY	lbs:/hour	TPY	Regulatory Citation(s)	See permit condition(s)
VE	All	8,760	<20%					62-296.320(4)(b)1., FAC	III.B.5.
SO ₂	Oil	8,760	0.5% S by weight			15.4	67,5	AO 53-244726	III.B.6.
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Notes:

^{*} The "Equivalent Emissions" listed are for informational purposes only.

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

FINAL Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No. Brief Description

[-004] Gas Turbine Peaking Unit 1

			Allowable Emissions			Equivalent Emissions*			
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour	TPY	lbs:/hour	TPY	Regulatory Citation(s)	See permit condition(s)
VE	IIA	8,760	<20%					62-296.320(4)(b)1., FAC	III.C.5.
SO ₂	Oil	8,760	0.5% S by weight			176,0	770.9	AO 53-244727	III.C.6.
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Notes:

^{*} The "Equivalent Emissions" listed are for informational purposes only.

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

FINAL Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No. Brief Description

[-005] McIntosh Unit 2 - Fossil Fuel Fired Steam Generator

•			Allowable Emissions		Equivalent Emissions*				
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour TPY	1	lbs./hour	TPY	Regulatory Citation(s)	See permit condition(s)
PM	Gas	8,760	0.10 lb/MM8tu			118.5	518.8	40 CFR 60.42(a)(1)	III.D.5.
PM	Oit	8,760	0.10 lb/MMBtu			111.5	488.4	40 CFR 60.42(a)(1)	III.D.5.
VE	All	8,760	20% w/ 27% for 6 min/hr					40 CFR 60.42(a)(2)	III.D.5.
SO ₂	Oil	8,760	0.80 lb/MMBtu			892.0	3,907.0	40 CFR 60.43(a)(1)	III.D.6.
NO _x	Gas	8,760	0.20 lb/MMBtu			236.9	1,037.6	40 CFR 60.44(a)(1)	III.D.8.
NOx	Oil	8,760	0.30 lb/MMBtu	Ì		355.4	1,556.4	40 CFR 60.44[a](2)	III.D.8.

Notes:

[electronic file name: 10500041.xls]

[electronic file name: xxxxxxx1.xls]

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

FINAL Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No. Brief Description

[-006] McIntosh Unit 3 - Fossil Fuel Fired Steam Generator

			Allowable Emissions	Allowable Emissions Equivalent Emissions*					
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour	TPY	lbs./hour	TPY	Regulatory Citation(s)	See permit condition(s)
PM	Coal	8,760	0.044 lb/MMBtu			160.2	701.5	PSD-FL-008(B)	III.E.5.
РМ	Coal/Pet Coke	8,760	0.044 lb/MMBtu			160.2	701.5	PSD-FL-008(B)	III.E.5.
РМ	Coal/RDF	8,760	0.050 lb/MMBtu			182.0	701.5	PSD-FL-008(B)	III.E.5.
РМ	Coal/Pet Coke/RDF	8,760	0,050 lb/MMBtu			182,0	797,2	PSD-FL-008(B)	III.E.5.
PM	Oit	8,760	0.070 lb/MMBtu			254.8	1,116.0	PSD-FL-008(B)	III.E.5.
PM	Oil/RDF	8,760	0.075 lb/MMBtu			273.0	1,195.7	PSD-FL-008(B)	III.E.5.
VE	All	8,760	20% w/ 27% for 6 min/hr	1			1	40 CFR 60.42(a)(2)	III.E.5.
SO ₂	Oil	8,760	0.80 lb/MMBtu			2,912.0	12,754.6	40 CFR 60.43(a)(1)	III.E.6. & 10
SO ₂	Solid	8,760	1.2 lb/MMBtu			4,368.0	19,131.8	40 CFR 60.43(a)(2)	III.E.6.
NOX	Gas	8,760	0.20 lb/MM8tu			728.0	3,188.6	40 CFR 60.44(a)(1)	III.E.13.
NOx	Liquid	8,760	0.30 lb/MMBtu			1,092.0	4,783.0	40 CFR 60.44(a)(2)	III.E.13.
NOx	Solid	8,760	0.70 lb/MMBtu			2,548.0	11,160.2	40 CFR 60.44(a)(3)	III.E.13.

Notes:

^{*} The "Equivalent Emissions" listed are for informational purposes only.

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

FINAL Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No. Brief Description

[-001] McIntosh Unit 1 - Fossil Fuel Fired Steam Generator

	_		Testing	Frequency	Min. Compliance		
Pollutant Name		Compliance	Time	Base	Test		
or Parameter	Fuel(s)	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
VE	Gas	DEP Method 9	Renewal	1-Jul	60 minutes		III.A.17. & 18. & 28.
VΕ	Oil	DEP Method 9	Annual	1-Jul	60 minutes		III.A.17. & 18. & 28.
PM	Gas	EPA Method 17, 5, 5B,or 5F	ASP No. 97-B-01	1-Jul	1 hour		III.A.19. & 29.
PM	Oil	EPA Method 17, 5, 5B,or 5F	Annual	1-Jul	1 hour		III.A.19. & 29.
SO ₂	Oil	EPA Method 6, 6A, 6B,or 6C	Annual	1-Jul	1 hour		III.A.15. & 20. & 27.
SO ₂	Oil	2.5% S by weight	Each Delivery				III.A.15. & 20. & 21.
Arsenic	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.11. & 30. & 34.
Cadmium	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.11, & 30, & 34.
Chromium	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.11. & 30. & 34.
Lead	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.11. & 30. & 34.
Total Halogens	Used Oil	ASTM Standard D140-70	Each Delivery		•		III.A.11, & 30, & 34,
Flash Point	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.11. & 30. & 34.
PCBs	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.11, & 30, & 34,
		·					
							,

Notes:

^{*} The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

^{* *} CMS [=] continuous monitoring system

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

FINAL Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No.	Brief Description	
[-002]	Diesel Engine Peaking Unit 2	
[-003]	Diesel Engine Peaking Unit 3	

	_		Testing	Frequency	Min. Compliance		
Pollutant Name		Compliance	Time	Base	Test		
or Parameter	Fuel(s)	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
VE	All	EPA Method 9	Annual	9-Jun	30 minutes		III.B.11.
SO ₂	Oil	0.5% S by weight	Each Delivery				III.B.6. & 9. & 12.
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Notes:

^{*} The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

^{**}CMS [=] continuous monitoring system

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

FINAL Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No. Brief Description

[-004] Gas Turbine Peaking Unit 1

Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS**	See permit condition(s)
VE VE SO ₂	Gas Oil Oil	EPA Method 9 EPA Method 9 0.5% S by weight	Renewal Annual Each Delivery	1-Aug	30 minutes 30 minutes		.C.11. & 16. .B.11. & 15. & 16. .C.6. & 9. & 12.

Notes:

^{*} The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

^{* *}CMS [=] continuous monitoring system

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

FINAL Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No.

Brief Description

[-005]

McIntosh Unit 2 - Fossil Fuel Fired Steam Generator

	<u></u>		Testing	Frequency	Min. Compliance		
Pollutant Name		Compliance	Time	Base	Test		
or Parameter	Fuel(s)	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
PM	Gas	EPA Method 17, 5, or 5B	ASP No. 97-B-01	23-Jun	1 hour		III.D.15., 19., & 27.
PM	Oit	EPA Method 17, 5, or 5B	Annual	23-Jun	1 hour		III.D.15., 19., & 27.
VE	Gas	EPA Method 9	Renewal	23-Jun	60 minutes	Yes	III.D.15, & 26,
VE	Oil	EPA Method 9	Annual	23-Jun	60 minutes	Yes	III.D.15. & 26.
SO ₂	Oil	EPA Method 6, 6A, or 6C	Annual	23-Jun	1 hour	Yes	III.D.16., 17., 19., & 29.
NO _X	All	EPA Method 7, 7A, 7C, 7D, or 7E	Annual	23-Jun	1 hour		III.D.15. & 19.
I							
				Ì			
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Notes:

^{*} The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

[&]quot;"CMS [=] continuous monitoring system

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

FINAL Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No.

Brief Description

[-006]

McIntosh Unit 3 - Fossil Fuel Fired Steam Generator

	_		Testing	Frequency	Min, Compliance		
Pollutant Name		Compliance	Time	Base	Test		·
or Parameter	Fuel(s)	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
PM	Gas Only	EPA Method 17, 5, or 5B	ASP No. 97-B-01	23-Jun	1 hour		III.E.21., 23., & 31.
PM	All Other	EPA Method 17, 5, or 5B	Annual	23-Jun	1 hour		III.E.21., 23., & 31.
VE	Gas Only	EPA Method 9	Renewal	23-Jun	60 minutes	Yes	III.D.21. & 30.
VE	All Other	EPA Method 9	Annual	23-Jun	60 minutes	Yes	III.D.21. & 30.
SO ₂	Liquid & Solid	EPA Method 6, 6A, or 6C	Annual	23-Jun	1 hour	Yes	III.E.21. & 23.
NO _x	All	EPA Method 7, 7A, 7C, 7D, or 7E	Annual	23-Jun	1 hour	Yes	III.E.21. & 23.
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Notes:

^{*} The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

^{**}CMS [=] continuous monitoring system

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 (version dated 02/05/97) (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

Appendix H-1, Permit History/ID Number Changes

City of Lakeland C. D. McIntosh

FINAL Permit No.: 1050004-003-AV

Facility ID No.: 1050004

Permit History (for tracking purposes):

E.U. <u>ID No</u>	Description	Permit No.	Issue Date	Expiration Date	Extended Date 1,2,3	Revised Date(s)
-001	Boiler Unit #1	AO53-243945	03/23/95	05/27/99		<u>,</u>
-002	Peaking Unit 2 (Diesel Engine)	AO53-244726	06/01/94	05/27/99		
-003	Peaking Unit 3 (Diesel Engine)	AO53-244726	06/01/94	05/27/99		
-004	Gas Turbine Peaking Unit 1	AO53-244727	06/01/94	05/27/99		
-005	Unit 2 Electric Generator	AO53-174090	04/17/90	04/13/95	08/14/96	•
-006	McIntosh Unit 3 Coal/MSW Fired	PSD-FL-008	12/27/78			
		PSD-FL-008A			•	
		PSD-FL-008B	12/11/95			
		PA74-06SR	12/07/78			

(if applicable) ID Number Changes (for tracking purposes):

From: Facility ID No.: 40TPA530004

To: Facility ID No.: 1050004

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.
- 3 ORDER EXTENDING PERMIT EXPIRATION DATE dated 02/09/98.

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

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant Facility ID No.: 1050004 Polk County

Initial Title V Air Operation Permit **PROPOSED Permit No.:** 1050004-003-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

Compliance Authority:

Department of Environmental Protection Southwest District Office 3804 Coconut Palm Drive Tampa, Florida 33619-8218 Telephone: 813/744-6100

Fax: 813/744-6084

Initial Title V Air Operation Permit **PROPOSED Permit No.:** 1050004-003-AV

Table of Contents

Section	Page Number
Placard Page	1
I. Facility Information	2 - 4
A. Facility Description.	
B. Summary of Emissions Unit ID Nos. and Brief Descriptions.	
C. Relevant Documents.	
II. Facility-wide Conditions	5 - 6
III. Emissions Units and Conditions	
A. Emissions Unit -001 McIntosh Unit 1	
B. Emissions Units -002 Diesel Engine Peaking Unit 2	18 - 22
-003 Diesel Engine Peaking Unit 3	
C. Emissions Unit -004 Gas Turbine Peaking Unit 1	23 - 28
D. Emissions Unit -005 McIntosh Unit 2	29 - 42
E. Emissions Unit -006 McIntosh Unit 3	43 - 61
IV. Acid Rain Part	
A. Acid Rain, Phase II	62 - 63
B. Acid Rain, Phase I	



Department of Environmental Protection

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

Virginia B. Wetherell Secretary

Permittee:

Lakeland Electric & Water Utilities 501 East Lemon Street Lakeland, Florida 33801-5079

PROPOSED Permit No.: 1050004-003-AV

Facility ID No.: 1050004

SIC Nos.: 49, 4911

Project: Initial Title V Air Operation Permit

This permit is for the operation of the C. D. McIntosh, Jr. Power Plant. This facility is located at 3030 East Lake Parker Drive, Lakeland, Polk County; UTM Coordinates: Zone 17, 409.0 km East and 3106.2 km North; Latitude: 28° 04' 50" North and Longitude: 81° 55' 32" 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:

ORDER EXTENDING PERMIT EXPIRATION DATE dated 02/09/98

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)
FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE REPORT (40 CFR 60; July 1996)
Phase II Acid Rain Application/Compliance Plan received 12/18/95
Alternate Sampling Procedure: ASP Number 97-B-01
APPENDIX 40 CFR 60, SUBPART A (40 CFR 60; July 1996)

Effective Date: January 1, 1999

Renewal Application Due Date: July 5, 2003

Expiration Date: December 31, 2003

Howard L. Rhodes, Director Division of Air Resources Management

HLR/sms/es

PROPOSED Permit No.: 1050004-003-AV

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of three fossil fuel fired steam generators, two diesel powered generators, and one gas turbine. Fossil fuel fired steam generators 1 and 2 are fired with No. 6 fuel oil and natural gas with distillate oil used as an ignitor. Fossil fuel fired steam generator 3 is primarily fired with coal, refuse derived fuel and petroleum coke.

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

Based on the initial Title V permit application received June 14, 1996, this facility is a major source of hazardous air pollutants (HAPs).

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

<u>Ł.U.</u>	<u>!</u>
<u>ID N</u>	No. Brief Description
-001	McIntosh Unit 1 - Fossil Fuel Fired Steam Generator
-002	Diesel Engine Peaking Unit 2
-003	Diesel Engine Peaking Unit 3
-004	Gas Turbine Peaking Unit 1
-005	McIntosh Unit 2 - Fossil Fuel Fired Steam Generator
-006	McIntosh Unit 3 - Fossil Fuel Fired Steam Generator

Unregulated Emissions Units and/or Activities

<u>E.U.</u>

ID No.	Brief Description of Emissions Units and/or Activity
-XXX	Tanks with greater than 10,000 gallon capacity installed prior to July 23, 1984
-XXX	Diesel drive coal tunnel sump engine
-xxx	Fire water UPS diesel No. 31
-XXX	Fire water UPS diesel No. 32
-xxx	CT startup diesel
-XXX	General purpose diesel engines
-xxx	Emergency generators
-XXX	General purpose painting
-XXX	Parts Cleaning
-XXX	Sand Blasting (Maintenance only)
-XXX	Wastewater Treatment Tank
-XXX	Three Cooling Towers (Unit 2 and 3)
-XXX	Northside Waste Water Treatment Facility - Wastewater treatment processes and
	tanks
-XXX	Northside Waste Water Treatment Facility - Two emergency diesel generators
-XXX	Northside Waste Water Treatment Facility - Chemical and petroleum storage
-xxx	Northside Waste Water Treatment Facility - Miscellaneous activities
-XXX	Coal processing and conveying system
-XXX	Coal storage system
-XXX	Coal transfer and loading system
-XXX	Limestone handling and storage system
-xxx	Flyash handling and storage system

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

PROPOSED Permit No.: 1050004-003-AV

Subsection C. Relevant Documents.

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

These documents are provided to the permittee for information purposes only:

Table 1-1, Summary of Air Pollutant Standards and Terms
Table 2-1, Summary of Compliance Requirements
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History / ID Number Changes

These documents are on file with permitting authority:

Initial Title V Permit Application received June, 14, 1996 Additional Information Request dated January 13, 1997 Additional Information Response received February 10, 1997 Additional Information received May 9, 1997 Letter received July 2, 1997 from Ms. Farzie Shelton Additional Information received July 8, 1997 Letter received August 7, 1997 from Ms. Farzie Shelton Letter received September 4, 1997 from Ms. Farzie Shelton

PROPOSED Permit No.: 1050004-003-AV

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>Unregulated Emissions Units and/or Activities.</u> Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit. [Rule 62-213.440(1), F.A.C.]
- 6. <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.]
- 7. 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. Containers shall be kept closed.

[Rule 62-296.320(1)(a), F.A.C.; Proposed by applicant in the initial Title V permit application received June 14, 1996; Revised by a letter received August 7, 1997]

PROPOSED Permit No.: 1050004-003-AV

8. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include: maintenance of paved areas; regular mowing of grass and care of vegetation; and limiting access to plant property by unnecessary vehicles.

[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in the initial Title V permit application received June 14, 1996, as amended in a request received July 8, 1997]

- 9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one. [Rule 62-213.440, F.A.C.]
- 10. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Southwest District office:

Department of Environmental Protection Southwest District Office 3804 Coconut Palm Drive Tampa, Florida 33619-8218 Telephone: 813/744-6100 Fax: 813/744-6084

11. 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, Georgia 30303
Telephone: 404/562-9099
Fax: 404/562-9095

III. Emissions Section Unit.

Subsection A. This section addresses the following emissions unit(s).

E.U.

ID No. Brief Description

-001 McIntosh Unit 1 - Fossil Fuel Fired Steam Generator

McIntosh Unit 1 is a forced draft boiler rated at a nominal load of 90 megawatts. The unit is fired with natural gas at a maximum heat input rate of 985 million Btu per hour (approximately 970 million cubic feet per hour), or No. 6 fuel oil, having a maximum sulfur content of 2.5 percent by weight, at a maximum heat input rate of 950 million Btu per hour (approximately 6,300 gallons per hour). This unit is also permitted to burn "on-specification" used oil generated by the City of Lakeland, at a maximum heat input rate of 950 million Btu per hour. McIntosh Unit 1 began commercial service in February, 1971.

{Permitting note(s): The emissions unit is regulated under Acid Rain, Phase II; and Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators with More than 250 million Btu per Hour Heat Input.}

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

Essential Potential to Emit (PTE) Parameters

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

<u>Unit No.</u>	MMBtu/hr Heat Input	<u>Fuel Type</u>
1	985	Natural Gas
	950	No. 6 Fuel Oil
	950	Used Oil

When a blend of fuel oil, "on-specification" used oil or natural gas is fired, the heat input is prorated based on the percent heat input of each fuel. The Acid Rain CEM will not be a method of compliance for the determination of the heat input rate.

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

- **A.2.** Emissions Unit Operating Rate Limitation After Testing. See specific condition **A.23**. [Rule 62-297.310(2), F.A.C.]
- **A.3.** Methods of Operation. Fuels. The only fuels allowed to be burned are natural gas, propane, No. 6 Fuel Oil, On-Specification Used Oil, No. 2 Fuel Oil and combinations of natural gas, propane, No. 6 Fuel Oil, No. 2 Fuel Oil and/or On-Specification Used Oil. On-Specification used oil containing any quantifiable levels of PCBs can only be fired when the emissions unit is at normal operating temperatures.

[Rule 62-213.410, F.A.C.; and, 40 CFR 271.20(e)(3)]

A.4. Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

{Permitting Note: The attached 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.}

- A.5. <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 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.]
- **A.6.** <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.]

- A.7. <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.]
- A.8. Particulate Matter Soot Blowing and Load Change. Particulate matter emissions shall not exceed an average of 0.3 pound per million Btu heat input during the 3-hours in any 24-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change. [Rule 62-210.700(3), F.A.C.]
- **A.9.** <u>Sulfur Dioxide</u>. When burning liquid fuel, sulfur dioxide emissions shall not exceed 2.75 pounds per million Btu heat input, as measured by applicable compliance methods. [Rule 62-296.405(1) (c)1.j., F.A.C.]
- **A.10.** Sulfur Dioxide Sulfur Content. The No. 6 fuel oil sulfur content shall not exceed 2.5 percent, by weight. See specific condition **A.21.** [Rule 62-296.405(1)(e)3., F.A.C.; and, AO 53-243945]

A.11. "On-Specification" Used Oil. Only "on-specification" used oil generated by the City of Lakeland shall be fired in this unit. The quantity fired in this unit shall not exceed 1,000 barrels (42,000 gallons) per calendar year. "On-specification" used oil is defined as used oil that meets the 40 CFR 279 (Standards for the Management of Used Oil) specifications listed below. Used oil that does not meet all of the following specifications is considered "off-specification" oil and shall not be fired.

CONSTITUENT / PROPERTY-* ALLOWABLE LEVEL 5 ppm maximum Arsenic 2 ppm maximum Cadmium Chromium 10 ppm maximum 100 ppm maximum Lead Total Halogens 1000 ppm maximum 100 °F minimum Flash Point less than 50 ppm **PCBs**

Excess Emissions

A.12. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.]

A.13. 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.

[Rule 62-210.700(2), F.A.C.]

A.14. 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.]

^{*} As determined by ASTM Standard D140-70, or equivalent [40 CFR 279.11; and, AO 53-243945]

PROPOSED Permit No.: 1050004-003-AV

Monitoring of Operations

A.15. Sulfur Dioxide. The permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. See specific conditions A.10., A.20. and A.21. [Rule 62-296.405(1)(f)1.b., F.A.C.]

A.16. 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. [Rule 62-297.310(5), 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.}

A.17. <u>Visible emissions</u>. The test method for visible emissions 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 A.18. [Rule 62-296.405(1)(e)1., F.A.C.]

PROPOSED Permit No.: 1050004-003-AV

- **A.18.** <u>DEP Method 9</u>. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:
- 1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
- 2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:
 - a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
 - b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

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

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

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

A.20. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedences of the sulfur dioxide emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with sulfur dioxide standards. The permittee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the permittee elected to demonstrate compliance by accepting a liquid fuel sulfur limit that will be verified with a fuel analysis provided by the vendor or the permittee upon each fuel delivery. See specific conditions A.10. and A.21.

[Rules 62-213.440, 62-296.405(1)(e)3. and 62-297.401, F.A.C.; and, AO 53-243945]

A.21. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or the respective successor

ASTM method(s).

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.440, F.A.C.]

A.22. 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.]

PROPOSED Permit No.: 1050004-003-AV

- **A.23.** Operating Rate During Testing. Testing of emissions shall be conducted with the 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.]
- **A.24.** <u>Calculation of Emission Rate</u>. 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.]

A.25. Applicable Test Procedures.

(a) Required Sampling Time.

135

- 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
- 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) <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) <u>Required Flow Rate Range</u>. 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, attached as part of this permit.
- (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.]

PROPOSED Permit No.: 1050004-003-AV

A.26. <u>Required Stack Sampling Facilities</u>. 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.

[Rule 62-297.310(6), F.A.C.]

- **A.27.** 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 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

155 C. C.

- b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
- 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
- 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 fuel, other than during startup, for a total of more than 400 hours.
- 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.; and, SIP approved]

- **A.28.** By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

- **A.29.** 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.]

- **A.30.** Compliance with the "on-specification" used oil requirements will be determined as follows:
- (a) Analysis of a sample collected from each batch delivered for firing; or,
- (b) The new batch delivery is from a collection site that has an acceptable analysis already on file with the facility and the analytical results are assumed by the facility for the batch.

For quantification purposes, the highest concentration of each constituent as determined by any analysis is assumed to be the concentration of the constituent of the blended used oil. See specific condition **A.11**.

[AO 53-243945]

PROPOSED Permit No.: 1050004-003-AV

Record keeping and Reporting Requirements

A.31. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department or the appropriate Local Program 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 Department or the appropriate Local Program. [Rule 62-210.700(6), F.A.C.]

A.32. Submit to the Department 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.]

A.33. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.

- PROPOSED Permit No.: 1050004-003-AV
- 8. The date, starting time and duration of each sampling run.
- 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- 10. The number of points sampled and configuration and location of the sampling plane.
- 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- 12. The type, manufacturer and configuration of the sampling equipment used.
- 13. Data related to the required calibration of the test equipment.
- 14. Data on the identification, processing and weights of all filters used.
- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

- **A.34.** Records shall be kept of each delivery of "on-specification" used oil with a statement of the origin of the used oil and the quantity delivered/stored for firing. In addition, monthly records shall be kept of the quantity of "on-specification" used oil fired in this unit. The above records shall be maintained in a form suitable for inspection, retained for a minimum of five years, and be made available upon request. [Rule 62-213.440(1)(b)2.b., F.A.C.; and, AO 53-243945]
- **A.35.** The permittee shall include in the "Annual Operating Report for Air Pollutant Emitting Facility" a summary of the "on-specification" used oil analyses for the calendar year and a statement of the total quantity of "on-specification" used oil fired in Unit 1 during the calendar year. [AO 53-243945]

Section III. Emissions Unit(s) and Conditions.

Subsection B. This section addresses the following emissions unit(s).

E.U.

ID No. Brief Description -002 Diesel Engine Peaking Unit 2

-003 Diesel Engine Peaking Unit 3

Diesel Engine Peaking Units 2 and 3 are diesel fired internal combustion engines which each drives a generator capable of producing electric power at a maximum rating of 2.5 megawatts. These units are each fired on No. 2 fuel oil, with a maximum sulfur content of 0.5 percent by weight, at a maximum firing rate of 201.6 gallons per hour. This corresponds to a maximum heat input of 28 million Btu per hour. Diesel Engine Peaking Units 2 and 3 began commercial service in 1970.

{Permitting note(s): The emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. Each diesel engine peaking unit has its own stack.}

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

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity.

- a. The maximum heat input rate of each diesel engine peaking unit is 28 million Btu per hour [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]
- b. **Not Federally Enforceable** The maximum firing rate of each diesel engine peaking unit is 201.6 gallons per hour firing No. 2 fuel oil. [AO 53-244726]
- **B.2.** Emissions Unit Operating Rate Limitation After Testing. See specific condition **B.13**. [Rule 62-297.310(2), F.A.C.]
- **B.3.** Methods of Operation Fuels. Only distillate (No. 2) fuel oil shall be fired in the diesel engine peaking units. [Rule 62-213.410, F.A.C.]
- **B.4.** Hours of Operation. These emissions units may operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AO 53-244726]

Emission Limitations and Standards

{Permitting Note: The attached 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.}

B.5. <u>Visible Emissions</u>. Visible emissions from each diesel engine peaking unit shall not be equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1., F.A.C.; and, AO 53-244726]

B.6. Not federally enforceable. Sulfur Dioxide - Sulfur Content. The sulfur content of the No. 2 fuel oil shall not exceed 0.5 percent, by weight. [AO 53-244726]

Excess Emissions

- **B.** 7. Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.]
- **B. 8.** 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

B.9. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor or the permittee upon each fuel delivery. See specific condition **B.12**. [Rule 62-213.440, F.A.C.]

PROPOSED Permit No.: 1050004-003-AV

B.10. Determination of Process Variables.

- (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

{Permitting note: 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.}

- **B.11.** The test method for visible emissions 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.]
- **B.12.** The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or the respective successor ASTM method(s).

[Rules 62-213.440 and 62-297.440, F.A.C.; and, AO 53-244726]

B.13. Operating Rate During Testing. Testing of emissions shall be conducted with the 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.]

B.14. Applicable Test Procedures.

(a) Required Sampling Time.

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

PROPOSED Permit No.: 1050004-003-AV

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.

[Rule 62-297.310(4)(a)2.c., F.A.C.]

- **B.15.** 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.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - 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.
 - 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.

- PROPOSED Permit No.: 1050004-003-AV
- (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.; SIP approved; and, AO 53-244726]

- **B.16.** By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

Recordkeeping and Reporting Requirements

B.17. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department 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 Department.

[Rule 62-210.700(6), F.A.C.]

B.18. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. [Rule 62-297.310(8), F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection C. This section addresses the following emissions unit(s).

E.U.

ID No. Brief Description

-004 Gas Turbine Peaking Unit 1

Gas Turbine Peaking Unit 1 consists of a gas turbine which drives a generator producing electrical power at a nominal nameplate rating of 20 megawatts. The gas turbine is fired with natural gas, or No. 2 fuel oil with a maximum sulfur content of 0.5 percent by weight. The maximum fuel firing rate is 320 million cubic feet per hour of natural gas (approximately 330 million Btu per hour) or 2,310 gallons per hour of No. 2 fuel oil (approximately 320 million Btu per hour). Gas Turbine Peaking Unit 1 began commercial service in 1973.

{Permitting notes: This emissions unit is regulated under Rule 62-210.300, F.A.C., Permits Required. This unit is not subject to 40 CFR 60. Subpart GG, Standards of Performance for New Stationary Gas Turbines.}

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

Essential Potential to Emit (PTE) Parameters

C.1. Permitted Capacity.

a. The maximum heat input rate of the turbine is 330 million Btu per hour (lower heating value) at 30 degrees F while firing natural gas and 320 million Btu per hour (lower heating value) at 30 degrees F while firing No. 2 fuel oil.

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

- b. **Not Federally Enforceable** The maximum firing rate of the turbine is 320 million cubic feet per hour when firing natural gas or 2,310 gallons per hour when firing No. 2 fuel oil. [AO 53-244727]
- C.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition C.13. [Rule 62-297.310(2), F.A.C.]
- **C.3.** <u>Methods of Operation Fuels</u>. Only natural gas or distillate (No. 2) fuel oil shall be fired in the combustion turbine.

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

C.4. Hours of Operation. These emissions unit(s) may operate continuously, i.e., 8,760 hours/year. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AO 53-244727]

Emission Limitations and Standards

{Permitting Note: The attached 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.}

C.5. <u>Visible Emissions</u>. Visible emissions from each turbine shall not be equal to or greater than 20 percent opacity.

[Rule 62-296.320(4)(b)1., F.A.C.; and, AO 53-244727]

C.6. Not federally enforceable. Sulfur Dioxide - Sulfur Content. The sulfur content of the No. 2 fuel oil shall not exceed 0.5 percent, by weight.

[AO 53-244727]

Excess Emissions

- C.7. Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.]
- C.8. 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

C.9. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor or the permittee upon each fuel delivery. See specific condition **C.12**. [Rule 62-213.440, F.A.C.]

PROPOSED Permit No.: 1050004-003-AV

C.10. Determination of Process Variables.

- (a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- (b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), 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.}

- C.11. The test method for visible emissions 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.]
- C.12. The ruel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or the respective successor ASTM method(s).

[Rules 62-213.440 and 62-297.440, F.A.C.; and, AO 53-244727]

C.13. Not federally enforceable. Operating Rate During Testing.

Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 95-100 percent of the manufacturer's rated heat input achievable for the average ambient (or conditioned) air temperature during the test. If it is impracticable to test at capacity, then sources may be tested at less than capacity. In such cases, the entire heat input vs. inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 105 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report.

[Requested in initial Title V permit application response for additional information dated February 10, 1997];

PROPOSED Permit No.: 1050004-003-AV

C.14. Applicable Test Procedures.

(a) Required Sampling Time.

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

[Rule 62-297.310(4)(a)2.c., F.A.C.]

- **C.15.** 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.
 - 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
 - a. Did not operate; or
 - b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - 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.

PROPOSED Permit No.: 1050004-003-AV

- (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.; SIP approved; and, AO 53-244727]

- C.16. <u>Visible Emissions Testing Annual</u>. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
- a. only gaseous fuels; or
- b. gaseous fuels in combination with any amount of liquid fuels for less than 400 hours per year; or
- c. only liquid fuels for less than 400 hours per year.

[Rules 62-297.310(7)(a)4. & 8., F.A.C.]

Recordkeeping and Reporting Requirements

C.17. <u>Malfunction Reporting</u>. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department 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 Department. [Rule 62-210.700(6), F.A.C.]

PROPOSED Permit No.: 1050004-003-AV

C.18. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. [Rule 62-297.310(8), F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection D. This section addresses the following emissions unit(s).

E.U.

ID No. Brief Description

-005 McIntosh Unit 2 - Fossil Fuel Fired Steam Generator

McIntosh Unit 2 is a nominal 114.7 megawatt (electric) fossil fuel fired steam generator. The unit is fired on low sulfur No. 6 or No. 2 fuel oil with a maximum heat input of 1,115 million Btu per hour, or natural gas with a maximum heat input of 1,184.5 million Btu per hour. McIntosh Unit 2 began commercial service in June, 1976.

{Permitting note(s): The emissions unit is regulated under Acid Rain, Phase II; and NSPS - 40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel Fired Steam Generators for Which Construction is Commenced After August 17, 1971, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.}

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

Essential Potential to Emit (PTE) Parameters

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

<u>Unit No.</u>	MMBtu/hr Heat Input	<u>Fuel Type</u>
2	1,184.5	Natural Gas
	1,115	No. 6 Fuel Oil
	1,115	No. 2 Fuel Oil

When a blend of fuel oil and natural gas is fired, the heat input is prorated based on the percent heat input of each fuel. The Acid Rain CEM will not be a method of compliance for the determination of the heat input rate.

[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 **D.23**. [Rule 62-297.310(2), F.A.C.]
- **D.3.** Methods of Operation. Fuels. The only fuels allowed to be burned are natural gas, propane, No. 6 Fuel Oil, No. 2 Fuel Oil and combinations of natural gas, propane, No. 6 Fuel Oil and/or No. 2 Fuel Oil. [Rule 62-213.410, F.A.C.]

PROPOSED Permit No.: 1050004-003-AV

D.4. Hours of Operation. This emissions unit is allowed to 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.}

Particulate Matter

- **D.5.** On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which:
- (1) Contain particulate matter in excess of 43 nanograms per joule heat input (0.10 lb per million Btu) derived from fossil fuel or fossil fuel and wood residue.
- (2) Exhibit greater than 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity.

[40 CFR 60.42(a)(1) & (2)]

Sulfur Dioxide

- **D.6.** On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of:
- (1) 340 nanograms per joule heat input (0.80 lb per million Btu) derived from liquid fossil fuel. [40 CFR 60.43(a)(1)]
- **D.7.** Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels.

[40 CFR 60.43(c)]

PROPOSED Permit No.: 1050004-003-AV

Nitrogen Oxides

- **D.8.** On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO₂ in excess of:
- (1) 86 nanograms per joule heat input (0.20 lb per million Btu) derived from gaseous fossil fuel.
- (2) 129 nanograms per joule heat input (0.30 lb per million Btu) derived from liquid fossil fuel. [40 CFR 60.44(a)(1) & (2)]
- **D.9.** When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) is determined by proration using the following formula:

$$PS_{NOx} = \underline{w(260) + x(86) + y(130) + z(300)}$$
$$\underline{w + x + y + z}$$

where:

PS_{NOx} = is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue tired;

w = is the percentage of total heat input derived from lignite;

x = is the percentage of total heat input derived from gaseous fossil fuel;

y = is the percentage of total heat input derived from liquid fossil fuel; and,

z = is the percentage of total heat input derived from solid fossil fuel (except lignite).

[40 CFR 60.44(b)]

Excess Emissions

- **D.10.** Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:
- (1) Opacity. Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.

[40 CFR 60.45(b)(2) and 60.45(g)(1)]

D.11. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.]

D.12. 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

D.13. 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. [Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

{Permitting note: 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.}

D.14. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of 40 CFR 60 or other methods and procedures as specified in 40 CFR 60.46, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.46(d).

[40 CFR 60.46(a)]

PROPOSED Permit No.: 1050004-003-AV

- **D.15.** The owner or operator shall determine compliance with the particulate matter, and NO_X standards in 40 CFR 60.42, 60.43, and 60.44 as follows:
- (1) The emission rate (E) of particulate matter, or NO_X shall be computed for each run using the following equation:

 $E = C F_d (20.9)/(20.9 - \% O_2)$

E = emission rate of pollutant, ng/J (1b/million Btu).

C = concentration of pollutant, ng/dscm (1b/dscf).

% O_2 = oxygen concentration, percent dry basis.

 F_d = factor as determined from Method 19.

- (2) Method 5 shall be used to determine the particular matter concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems.
 - (i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train may be set to provide a gas temperature no greater than 160 ± 14 °C (320 ± 25 °F).
 - (ii) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (% O_2). The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab sampling procedure is used, the O_2 concentration for the run shall be the arithmetic mean of all the individual O_2 sample concentrations at each traverse point.
 - (iii) If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 traverse points.
- (3) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.
- (5) Method 7 shall be used to determine the NO_X concentration.
 - (i) The sampling site and location shall be the same as for the SO₂ sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.
 - (ii) For each NO_X sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (% O_2). The sample shall be taken simultaneously with, and at the same point as, the NO_X sample.
- (iii) The NO_X emission rate shall be computed for each pair of NO_X and O₂ samples. The NO_X emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples. [40 CFR 60.46(b)(1), (2), (3), & (5)]
- **D.16.** Compliance with the sulfur dioxide emission standard of specific condition **D.7.** shall be demonstrated using the fuel sampling and analysis procedures of specific condition **D.17.** [Rule 62-213.440, F.A.C. and Applicant Request dated June 14, 1996]

PROPOSED Permit No.: 1050004-003-AV

- **D.17.** The following fuel sampling and analysis program shall be used to demonstrate compliance with the sulfur dioxide standard and as the substitute for the sulfur dioxide continuous monitoring system:
 - a. Determine and record the as-fired fuel sulfur content, percent by weight, (1) for liquid fuels using either ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, or the respective successor ASTM method(s), to analyze a representative sample of the blended fuel following each fuel delivery, (2) for gaseous fuels using ASTM D1072-90, or the respective successor ASTM method.
 - b. Record daily the amount of each fuel fired, the density of each fuel, and the percent sulfur content by weight of each fuel.
 - c. Utilize the information in a. and b., above, to calculate the SO_2 emission rate to ensure compliance at all times.

[Rules 62-213.440, F.A.C.]

- **D.18.** When combinations of fossil fuels are fired, the owner or operator (in order to compute the prorated standard as shown in 40 CFR 60.44(b)) shall determine the percentage (w, x, y, or z) of the total heat input derived from each type of fuel as follows:
- (1) The heat input rate of each fuel shall be determined by multiplying the gross calorific value of each fuel fired by the rate of each fuel burned.
- (2) ASTM Methods D 240-76 (liquid fuels), or D 1826-77 (gaseous fuels) (incorporated by reference-see 40 CFR 60.17) shall be used to determine the gross calorific values of the fuels.
- (3) Suitable methods shall be used to determine the rate of each fuel burned during each test period, and a material balance over the steam generating system shall be used to confirm the rate. [40 CFR 60.46(c)(1), (2), & (3)]
- **D.19.** The owner or operator may use the following as alternatives to the reference methods and procedures in 40 CFR 60.46 or in other sections as specified:
- (1) The emission rate (E) of particulate matter, SO_2 and NO_X may be determined by using the Fc factor, provided that the following procedure is used:
 - (i) The emission rate (E) shall be computed using the following equation:

$$E = C F_c (100 / \% CO_2)$$

where:

E = emission rate of pollutant, ng/J (lb/million Btu).

C = concentration of pollutant, ng/dscm (lb/dscf).

% CO_2 = carbon dioxide concentration, percent dry basis.

 F_c = factor as determined in appropriate sections of Method 19.

- (ii) If and only if the average F_c factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O_2 and CO_2 concentration according to the procedures in 40 CFR 60.46(b)(2)(ii), (4)(ii), or (5)(ii). Then if F_o (average of three runs), as calculated from the equation in Method 3B, is more than \pm 3 percent than the average F_o value, as determined from the average values of F_d and F_c in Method 19, i.e., F_{oa} =0.209 (F_{da} / F_{ca}), then the following procedure shall be followed:
 - (A) When F_o is less than 0.97 F_{oa} , then E shall be increased by that proportion under 0.97 F_{oa} , e.g., if F_o is 0.95 F_{oa} , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.
 - (B) When F_o is less than 0.97 F_{oa} and when the average difference (d) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{oa} , e.g., if F_o is 0.95 F_{oa} , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
 - (C) When F_0 is greater than 1.03 F_{0a} and when \overline{d} is positive, then E shall be decreased by that proportion over 1.03 F_{0a} , e.g., if F_0 is 1.05 F_{0a} , E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
- (2) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack gas temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). Method 17 shall not be used after wet FGD systems if the effluent gas is saturated or laden with water droplets.
- (3) Particulate matter and SO₂ may be determined simultaneously with the Method 5 train provided that the following changes are made:
 - (i) The filter and impinger apparatus in sections 2.1.5 and 2.1.6 of Method 8 is used in place of the condenser (section 2.1.7) of Method 5.
 - (ii) All applicable procedures in Method 8 for the determination of SO₂ (including moisture) are used
- (5) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the O₂ concentration (%O₂) for the emission rate correction factor.
- (6) For Method 3, Method 3A or 3B may be used.
- (7) For Method 3B, Method 3A may be used.
- [40 CFR 60.46(d)(1), (2), (3), (5), (6), & (7)]

PROPOSED Permit No.: 1050004-003-AV

D.20. 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.]

200

- **D.21.** Operating Rate During Testing. Testing of emissions shall be conducted with the 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.]
- **D.22.** 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 three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

D.23. Applicable Test Procedures.

(a) Required Sampling Time.

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

- 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) <u>Required Flow Rate Range</u>. 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, attached as part of this permit.
- (e) <u>Allowed Modification to EPA Method 5</u>. 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.]
- **D.24.** 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.

[Rule 62-297.310(6), F.A.C.]

PROPOSED Permit No.: 1050004-003-AV

D.25. <u>Frequency of Compliance Tests</u>. 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.
 - 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 and/or solid fuel for a total of no more than 400 hours.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;
 - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
 - c. Each NESHAP pollutant, if there is an applicable emission standard.
 - 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.
 - 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.; and, SIP approved]

- **D.26.** By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

- **D.27.** 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; cr
- 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.]

Continuous Monitoring Requirements

- **D.28.** The owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions. [40 CFR 60.45(a)]
- **D.29.** Sulfur Dioxide. For a fossil fuel fired steam generator that does not use a flue gas desulfurization device, a continuous monitoring system for measuring sulfur dioxide emissions is not required if the owner or operator monitors sulfur dioxide emissions by fuel sampling and analysis under 40 CFR 60.45(d). The applicant has elected to utilize fuel sampling and analysis in lieu of a continuous monitoring system for sulfur dioxide. See specific condition **D.19.**

[40 CFR 60.45(b)(2)]

PROPOSED Permit No.: 1050004-003-AV

- **D.30.** For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:
- (3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent.

 [40 CFR 60.45(c)(3)]

Recordkeeping and Reporting Requirements

- **D.31.** Excess emission and monitoring system performance reports shall be submitted to the Administrator for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c).

 [40 CFR 60.45(g)]
- **D.32.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department 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 Department. Rule 62-210.700(6), F.A.C.]
- **D.33.** Submit to the Department a written report of emissions in excess of emission limiting standards 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.

 [Rule 62-213.440, F.A.C.]

D.34. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.

- 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
- 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
- 8. The date, starting time and duration of each sampling run.
- 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- 10. The number of points sampled and configuration and location of the sampling plane.
- 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- 12. The type, manufacturer and configuration of the sampling equipment used.
- 13. Data related to the required calibration of the test equipment.
- 14. Data on the identification, processing and weights of all filters used.
- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

PROPOSED Permit No.: 1050004-003-AV

Miscellaneous Requirements.

D.35. The permittee shall comply with the requirements contained in Appendix 40 CFR 60, Subpart A, attached to this permit. [Rule 62-204.800(7)(d), F.A.C.]

Section III. Emissions Unit(s) and Conditions.

Subsection E. This section addresses the following emissions unit(s).

E.U.

ID No. Brief Description

-006 McIntosh Unit 3 - Fossil Fuel Fired Steam Generator

McIntosh Unit 3 is a nominal 364 megawatt (electric) fossil fuel fired steam generator. The unit is fired on coal, residual oil, natural gas and co-fires refuse derived fuel (RDF) and petroleum coke. The maximum heat input rate is 3,640 million Btu per hour. Unit 3 is equipped with an electrostatic precipitator (ESP), a flue gas desulfurization system (FGD), and low-NO_x burners to control emissions. McIntosh Unit 3 began commercial service in September, 1982.

{Permitting note(s): The emissions unit is regulated under Acid Rain, Phase II; and NSPS - 40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel Fired Steam Generators for Which Construction is Commenced After August 17, 1971, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 212.400(6), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination }

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

Essential Potential to Emit (PTE) Parameters

- **E.1.** Capacity. The maximum heat input rate is 3,640 MMBtu per hour. The Acid Rain CEM will not be a method of compliance for the determination of the heat input rate. [Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]
- **E.2.** Emissions Unit Operating Rate Limitation After Testing. See specific condition **E.21**. [Rule 62-297.310(2), F.A.C.]

E.3. Methods of Operation - Fuels. The only fuels allowed to be burned are:

Coal only

Low sulfur fuel oil only (≤ 0.5 percent sulfur by weight)

Coal and up to 10 percent refuse (based on heat input)

Low sulfur fuel oil and up to 10 percent refuse (based on heat input)

Coal and up to 20 percent petroleum coke (based on weight)

Coal and up to 20 percent petroleum coke (based on weight) and 10 percent refuse

(based on heat input)

High sulfur fuel oil (> 0.5 percent sulfur by weight)

Natural gas or propane only, or in combination with any of the other fuels or fuel combinations listed above

[Rules 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C.; and, PSD-FL-008(B)]

E.4. Hours of Operation. This emissions unit is allowed to 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.}

Particulate Matter

E.5. Particulate matter emitted to the atmosphere from the boiler shall not exceed:

(1)	Mode of Firing	Pound / MMBtu Heat Input
	Coal	0.044
	Coal/Petroleum Coke	0.044
	Coal/Refuse	0.050
	Coal/Petroleum Coke/Refuse	0.050
	Oil	0.070
	Oil/Refuse	0.075

⁽²⁾ Exhibit greater than 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity.

[40 CFR 60.42(a)(2); and, PSD-FL-008(B)]

PROPOSED Permit No.: 1050004-003-AV

Sulfur Dioxide

- **E.6.** On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which contain sulfur dioxide in excess of:
- (1) 340 nanograms per joule heat input (0.80 lb per million Btu) derived from liquid fossil fuel or liquid fossil fuel and wood residue.
- (2) 520 nanograms per joule heat input (1.2 lb per million Btu) derived from solid fossil fuel or solid fossil fuel and wood residue, except as provided in 40 CFR 60.43(e). [40 CFR 60.43(a)(1) and (2)]
- E.7. When different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) shall be determined by proration using the following formula:

$$PS_{SO2} = [y(340) + z(520)]/(y+z)$$

where:

PS_{SO2} is the prorated standard for sulfur dioxide when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired,

y is the percentage of total heat input derived from liquid fossil fuel, and z is the percentage of total heat input derived from solid fossil fuel. [40 CFR 60.43(b)]

E.8. Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels.

[40 CFR 60.43(c)]

E.9. A flue gas desulfurization system will be installed to treat exhaust gases and will operate such that whenever coal or blends of coal and petroleum coke or refuse are burned, sulfur dioxide gases discharged to the atmosphere from the boiler shall not exceed 10 percent of the potential combustion concentration (90 percent reduction), or 35 percent of the potential combustion concentration (65 percent reduction), when emissions are less than 0.75 pound per million Btu heat input. Compliance with the percent reduction requirement shall be determined on a 30-day rolling average. This compliance information shall be retained for a period of five years and made available by the City upon request of the Department. Whenever blends of petroleum coke with other fuels are co-fired, sulfur dioxide emissions shall not exceed 0.718 pound per million Btu heat input based on a 30-day rolling average and shall comply with the reduction requirements given above.

[PSD-FL-008(B) and Rule 62-213.440, F.A.C.]

PROPOSED Permit No.: 1050004-003-AV

- **E.10.** The burning of high sulfur oil (greater than 0.5 percent sulfur by weight) or a combination of high sulfur oil and municipal refuse as an emergency fuel without the use of the SO₂ scrubber will be allowed only when the flue gas desulfurization system malfunctions to the extent that the burning of coal would cause emission limitations to be exceeded. Sulfur dioxide emitted to the atmosphere from the boiler shall not exceed 0.8 pound per million Btu heat input under this condition. [PSD-FL-008(B)]
- **E.11.** During malfunctions of equipment which cause an interruption of the coal feed to the boiler, the burning of high sulfur oil (greater than 0.5 percent sulfur by weight) or a combination of high sulfur oil and municipal refuse will be allowed only if all flue gases are fully scrubbed by the SO₂ scrubber. Sulfur dioxide emitted to the atmosphere from the boiler shall not exceed 0.8 pound per million Btu heat input under this condition.

 [PSD-FL-008(B)]

E.12. Continuous burning of natural gas, low sulfur fuel oil (less than or equal to 0.5 percent sulfur by weight), or combinations of these two fuels with or without the use of the SO₂ scrubber will be allowed. [PSD-FL-008(B)]

Nitrogen Oxides

- **E.13.** On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of 40 CFR 60, Subpart D, shall cause to be discharged into the atmosphere from any affected facility any gases which contain nitrogen oxides, expressed as NO₂ in excess of:
- (1) 86 nanograms per joule heat input (0.20 lb per million Btu) derived from gaseous fossil fuel.
- (2) 129 nanograms per joule heat input (0.30 lb per million Btu) derived from liquid fossil fuel, liquid fossil fuel and wood residue, or gaseous fossil fuel and wood residue.
- (3) 300 nanograms per joule heat input (0.70 lb per million Btu) derived from solid fossil fuel or solid fossil fuel and wood residue (except lignite or a solid fossil fuel containing 25 percent, by weight, or more of coal refuse).

[40 CFR 60.44(a)(1), (2), & (3)]

E.14. Except as provided under paragraphs 40 CFR 60.44(c) and (d), when different fossil fuels are burned simultaneously in any combination, the applicable standard (in ng/J) is determined

PROPOSED Permit No.: 1050004-003-AV

$$PS_{NOx} = \underline{w(260) + x(86) + y(130) + z(300)}$$
$$w + x + y + z$$

by proration using the following formula:

where:

 PS_{NOx} = is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in nanograms per joule heat input derived from all fossil fuels fired or from all fossil fuels and wood residue fired;

w = is the percentage of total heat input derived from lignite;

x = is the percentage of total heat input derived from gaseous fossil fuel;

y = is the percentage of total heat input derived from liquid fossil fuel; and,

z = is the percentage of total heat input derived from solid fossil fuel (except lignite).

[40 CFR 60.44(b)]

Excess Emissions

- **E.15.** Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:
- (1) <u>Opacity</u>. Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.
- (2) <u>Sulfur dioxide</u>. Excess emissions for affected facilities are defined as:
 - (i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard under 40 CFR 60.43.

[40 CFR 60.45(g)(1), & (2)]

E.16. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.17. 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.]

E.18. In addition to the requirements of 40 CFR 60.7, each excess emissions report shall include the periods of oil consumption due to flue gas desulfurization system malfunction. [PSD-FL-008]

Monitoring of Operations

E.19. 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. [Rule 62-297.310(5), F.A.C.]

Test Methods and Procedures

{Permitting note: 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.20. In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in Appendix A of 40 CFR 60 or other methods and procedures as specified in 40 CFR 60.46, except as provided in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in 40 CFR 60.46(d). [40 CFR 60.46(a)]

- **E.21.** The owner or operator shall determine compliance with the particulate matter, SO_2 , and NO_X standards in 40 CFR 60.42, 60.43, and 60.44 as follows:
- (1) The emission rate (E) of particulate matter, SO₂, or NO_X shall be computed for each run using the following equation:

 $E = C F_d (20.9)/(20.9 - \% O_2)$

E = emission rate of pollutant, ng/J (1b/million Btu).

C = concentration of pollutant, ng/dscm (1b/dscf).

% O_2 = oxygen concentration, percent dry basis.

 F_d = factor as determined from Method 19.

PROPOSED Permit No.: 1050004-003-AV

- (2) Method 5 shall be used to determine the particular matter concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems and Method 5B shall be used to determine the particulate matter concentration (C) after FGD systems.
 - (i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train may be set to provide a gas temperature no greater than 160 ± 14 °C (320 ± 25 °F).
 - (ii) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (% O_2). The O_2 sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab sampling procedure is used, the O_2 concentration for the run shall be the arithmetic mean of all the individual O_2 sample concentrations at each traverse point.
 - (iii) If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O_2 traverse points.
- (3) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.
- (4) Method 6 shall be used to determine the SO₂ concentration.
 - (i) The sampling site shall be the same as that selected for the particulate sample. The sampling location in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). The sampling time and sample volume for each sample run shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Two samples shall be taken during a 1-hour period, with each sample taken within a 30-minute interval.
 - (ii) The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (% O_2). The O_2 sample shall be taken simultaneously with, and at the same point as, the SO_2 sample. The SO_2 emission rate shall be computed for each pair of SO_2 and O_2 samples. The SO_2 emission rate (E) for each run shall be the arithmetic mean of the results of the two pairs of samples.
- (5) Method 7 shall be used to determine the NO_X concentration.
 - (i) The sampling site and location shall be the same as for the SO₂ sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.
 - (ii) For each NO_X sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O_2 concentration (% O_2). The sample shall be taken simultaneously with, and at the same point as, the NO_X sample.
- (iii) The NO_X emission rate shall be computed for each pair of NO_X and O₂ samples. The NO_X emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples. [40 CFR 60.46(b)(1), (2), (3), (4), & (5)]

- **E.22.** When combinations of fossil fuels or fossil fuel and wood residue are fired, the owner or operator (in order to compute the prorated standard as shown in 40 CFR 60.43(b) and 60.44(b)) shall determine the percentage (w, x, y, or z) of the total heat input derived from each type of fuel as follows:
- (1) The heat input rate of each fuel shall be determined by multiplying the gross calorific value of each fuel fired by the rate of each fuel burned.
- (2) ASTM Methods D 2015-77 (solid fuels), D 240-76 (liquid fuels), or D 1826-77 (gaseous fuels) (incorporated by reference-see 40 CFR 60.17) shall be used to determine the gross calorific values of the fuels. The method used to determine the calorific value of wood residue must be approved by the Administrator.
- (3) Suitable methods shall be used to determine the rate of each fuel burned during each test period, and a material balance over the steam generating system shall be used to confirm the rate.

 [40 CFR 60.46(c)(1), (2), & (3)]
- **E.23.** The owner or operator may use the following as alternatives to the reference methods and procedures in 40 CFR 60.46 or in other sections as specified:
- (1) The emission rate (E) of particulate matter, SO_2 and NO_X may be determined by using the Fc factor, provided that the following procedure is used:
 - (i) The emission rate (E) shall be computed using the following equation:

$$E = C F_c (100 / \% CO_2)$$

where:

E = emission rate of pollutant, ng/J (lb/million Btu).

C = concentration of pollutant, ng/dscm (lb/dscf).

% CO_2 = carbon dioxide concentration, percent dry basis.

 F_c = factor as determined in appropriate sections of Method 19.

- (ii) If and only if the average F_c factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O_2 and CO_2 concentration according to the procedures in 40 CFR 60.46(b) (2)(ii), (4)(ii), or (5)(ii). Then if F_o (average of three runs), as calculated from the equation in Method 3B, is more than \pm 3 percent than the average F_o value, as determined from the average values of F_d and F_c in Method 19, i.e., F_{oa} =0.209 (F_{da} / F_{ca}), then the following procedure shall be followed:
 - (A) When F_0 is less than 0.97 F_{0a} , then E shall be increased by that proportion under 0.97 F_{0a} , e.g., if F_0 is 0.95 F_{0a} , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.

- (B) When F_o is less than 0.97 F_{oa} and when the average difference (d) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{oa} , e.g., if F_o is 0.95 F_{oa} , E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
- (C) When F_0 is greater than 1.03 F_{0a} and when \overline{d} is positive, then E shall be decreased by that proportion over 1.03 F_{0a} , e.g., if F_0 is 1.05 F_{0a} , E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
- (2) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack gas temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). The procedures of sections 2.1 and 2.3 of Method 5B may be used with Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after wet FGD systems if the effluent gas is saturated or laden with water droplets.
- (3) Particulate matter and SO₂ may be determined simultaneously with the Method 5 train provided that the following changes are made:
 - (i) The filter and impinger apparatus in sections 2.1.5 and 2.1.6 of Method 8 is used in place of the condenser (section 2.1.7) of Method 5.
 - (ii) All applicable procedures in Method 8 for the determination of SO₂ (including moisture) are used.
- (4) For Method 6, Method 6C may be used. Method 6A may also be used whenever Methods 6 and 3B data are specified to determine the SO₂ emission rate, under the conditions in 40 CFR 60.46(d)(1).
- (5) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the O₂ concentration (%O₂) for the emission rate correction factor.
- (6) For Method 3, Method 3A or 3B may be used.
- (7) For Method 3B, Method 3A may be used.
- [40 CFR 60.46(d)(1), (2), (3), (4), (5), (6), & (7)]
- **E.24.** 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.]

PROPOSED Permit No.: 1050004-003-AV

E.25. Operating Rate During Testing. Testing of emissions shall be conducted with the 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.26. 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 three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]

E.27. Applicable Test Procedures.

(a) Required Sampling Time.

- 1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
- 2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - 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.

PROPOSED Permit No.: 1050004-003-AV

- (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) <u>Required Flow Rate Range</u>. 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, attached as part of this permit.
- (e) <u>Allowed Modification to EPA Method 5</u>. 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.28.** 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.

[Rule 62-297.310(6), F.A.C.]

- **E.29.** 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 and/or solid fuel for a total of no more than 400 hours.
 - 4. During each federal fiscal year (October 1 September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
 - a. Visible emissions, if there is an applicable standard;

PROPOSED Permit No.: 1050004-003-AV

- 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
- c. Each NESHAP pollutant, if there is an applicable emission standard.
- 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.
- 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) <u>Waiver of Compliance Test Requirements</u>. 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.; and, SIP approved]

- **E.30.** By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:
- a. only gaseous fuel(s); or
- b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
- c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

PROPOSED Permit No.: 1050004-003-AV

- **E.31.** 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.]

Continuous Monitoring Requirements

- **E.32.** Each owner or operator shall install, calibrate, maintain, and operate continuous monitoring systems for measuring the opacity of emissions, sulfur dioxide emissions, and either oxygen or carbon dioxide except as provided in 40 CFR 60.45(b). [40 CFR 60.45(a)]
- **E.33.** Certain of the continuous monitoring system requirements under 40 CFR 60.45(a) do not apply to owners or operators under the following conditions:
- (1) For a fossil fuel-fired steam generator that burns only gaseous fossil fuel, continuous monitoring systems for measuring the opacity of emissions and sulfur dioxide emissions are not required.
- (2) For a fossil fuel-fired steam generator that does not use a flue gas desulfurization device, a continuous monitoring system for measuring sulfur dioxide emissions is not required if the owner or operator monitors sulfur dioxide emissions by fuel sampling and analysis under 40 CFR 60.45(d).
- (3) Notwithstanding 40 CFR 60.13(b), installation of a continuous monitoring system for nitrogen oxides may be delayed until after the initial performance tests under 40 CFR 60.8 have been conducted. If the owner or operator demonstrates during the performance test that emissions of nitrogen oxides are less than 70 percent of the applicable standards in 40 CFR 60.44, a continuous monitoring system for measuring nitrogen oxides emissions is not required. If the initial performance test results show that nitrogen oxide emissions are greater than 70 percent of the applicable standard, the owner or operator shall install a continuous monitoring system for nitrogen oxides within one year after the date of the initial performance tests under 40 CFR 60.8 and comply with all other applicable monitoring requirements under 40 CFR 60.
- (4) If an owner or operator does not install any continuous monitoring systems for sulfur oxides and nitrogen oxides, as provided under 40 CFR 60.45(b)(1) and (b)(3) or (b)(2) and (b)(3), a continuous monitoring system for measuring either oxygen or carbon dioxide is not required.

 [40 CFR 60.45(b)(1), (2), (3), & (4)]

- PROPOSED Permit No.: 1050004-003-AV
- **E.34.** For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:
- (1) Methods 6, 7, and 3B, as applicable, shall be used for the performance evaluations of sulfur dioxide and nitrogen oxides continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B are given in 40 CFR 60.46(d).
- (2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60.
- (3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined as follows:

[In parts per million]

Fossil fuel	Span value for sulfur dioxide	.•		•		
Gas	{1}					
Liquid	1,000					
Solid	1,500					
Combinations	1,000y+1,500z					

{1}Not applicable.

where:

- x = the fraction of total heat input derived from gaseous fossil fuel, and
- y = the fraction of total heat input derived from liquid fossil fuel, and
- z = the fraction of total heat input derived from solid fossil fuel.
- (4) All span values computed under 40 CFR 60.45(c)(3) for burning combinations of fossil fuels shall be rounded to the nearest 500 ppm.
- (5) For a fossil fuel-fired steam generator that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Administrator's approval.

[40 CFR 60.45(c)(1), (2), (3), (4), & (5)]

PROPOSED Permit No.: 1050004-003-AV

- **E.35.** For any continuous monitoring system installed under 40 CFR 60.45(a), the following conversion procedures shall be used to convert the continuous monitoring data into units of the applicable standards (ng/J, lb/million Btu):
- (1) When a continuous monitoring system for measuring oxygen is selected, the measurement of the pollutant concentration and oxygen concentration shall each be on a consistent basis (wet or dry). Alternative procedures approved by the Administrator shall be used when measurements are on a wet basis. When measurements are on a dry basis, the following conversion procedure shall be used:

 $E = CF[20.9/(20.9-percent O_2)]$

where:

E, C, F, and % O₂ are determined under 40 CFR 60.45(f).

(2) When a continuous monitoring system for measuring carbon dioxide is selected, the measurement of the pollutant concentration and carbon dioxide concentration shall each be on a consistent basis (wet or dry) and the following conversion procedure shall be used:

 $E = CF_c [100/percent CO_2]$

where:

E, C, F_c and % CO₂ are determined under 40 CFR 60.45(f). [40 CFR 60.45(e)(1) and (2)]

- E.36. The values used in the equations under 40 CFR 60.45(e) (1) and (2) are derived as follows:
- (1) E = pollutant emissions, ng/J (lb/million Btu).
- (2) C = pollutant concentration, ng/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each one-hour period by 4.15×10^4 M ng/dscm per ppm (2.59×10^{-9} M lb/dscf per ppm) where M = pollutant molecular weight, g/g-mole (lb/lb-mole). M = 64.07 for sulfur dioxide and 46.01 for nitrogen oxides.
- (3) % O_2 , % CO_2 = oxygen or carbon dioxide volume (expressed as percent), determined with equipment specified under 40 CFR 60.45(a).
- (4) F, F_c = a factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), and a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted (F_c), respectively. Values of F and F_c are given as follows:
 - (i) For anthracite coal as classified according to ASTM D388-77 (incorporated by reference-see 40 CFR 60.17), $F = 2,723 \times 10^{-17}$ dscm/J (10,140 dscf/million Btu and $F_c = 0.532 \times 10^{-17}$ scm CO_2 /J (1,980 scf CO_2 /million Btu).

PROPOSED Permit No.: 1050004-003-AV

- (ii) For subbituminous and bituminous coal as classified according to ASTM D388-77 (incorporated by reference-see 40 CFR 60.17), $F = 2.637 \times 10^{-7}$ dscm/J (9,820 dscf/million Btu) and $F_c = 0.486 \times 10^{-7} \text{ scm CO}_2 / J (1,810 \text{ scf CO}_2 / \text{million Btu}).$
- (iii) For liquid fossil fuels including crude, residual, and distillate oils, $F = 2.476 \times 10^{-7}$ dscm/J
- (9,220 dscf/million Btu) and $F_c = 0.384 \times 10^{-7}$ scm CO_2 /J (1,430 scf CO_2 /million Btu). (iv) For gaseous fossil fuels, $F = 2.347 \times 10^{-7}$ dscm/J (8,740 dscf/million Btu). For natural gas, propane, and butane fuels, $F_c = 0.279 \times 10^{-7}$ scm CO_2 /J (1,040 scf CO_2 /million Btu) for natural gas, 0.322×10^{-7} scm CO₂ /J (1,200 scf CO₂/million Btu) for propane, and 0.338×10^{-7} scm CO₂ /J (1,260 scf CO₂ /million Btu) for butane.
- (5) The owner or operator may use the following equation to determine an F factor (dscm/J or dscf/million Btu) on a dry basis (if it is desired to calculate F on a wet basis, consult the Administrator) or F_c factor (scm CO₂ /J, or scf CO₂ /million Btu) on either basis in lieu of the F or F_c factors specified in 40 CFR 60.45(f)(4):

$$F = 10^{-6} \frac{[227.2 \text{ (pct. II)} + 95.5 \text{ (pct. C)} + 35.6 \text{ (pct. S)} + 8.7 \text{ (pct. N)} - 28.7 \text{ (pct. O)}]}{GCV}$$

$$F_c = \frac{2.0 \times 10^{-5} \text{ (pct. C)}}{\text{GCV}}$$
(SI units)

$$F = 10^{6} \frac{3.64(\%H) + 1.53(\%C) + 0.57(\%S) + 0.14(\%N) - 0.46(\%O)}{GCV}$$
(English units)

$$F_c = \frac{20.0(\%C)}{GCV}$$
(SI units)

$$F_c = \frac{321 \times 10^3 \text{ (\%C)}}{\text{GCV}}$$
(English units)

PROPOSED Permit No.: 1050004-003-AV

- (i) H, C, S, N, and O are content by weight of hydrogen, carbon, sulfur, nitrogen, and oxygen (expressed as percent), respectively, as determined on the same basis as GCV by ultimate analysis of the fuel fired, using ASTM method D3178-74 or D3176 (solid fuels) or computed from results using ASTM method D1137-53(75), D1945-64(76), or D1946-77 (gaseous fuels) as applicable. (These five methods are incorporated by reference-see 40 CFR 60.17.)
- (ii) GCV is the gross calorific value (kJ/kg, Btu/lb) of the fuel combusted determined by the ASTM test methods D2015-77 for solid fuels and D1826-77 for gaseous fuels as applicable.

(These two methods are incorporated by reference-see 40 CFR 60.17.)

- (iii) For affected facilities which fire both fossil fuels and nonfossil fuels, the F or F_c value shall be subject to the Administrator's approval.
- (6) For affected facilities firing combinations of fossil fuels or fossil fuels and wood residue, the F or F_c factors determined by paragraphs 40 CFR 60.45(f)(4) or (f)(5) shall be prorated in accordance with the applicable formula as follows:

$$F = \sum_{i=1}^{n} X_i F_i \quad \text{or} \qquad F_c = \sum_{i=1}^{n} X_i (F_c)_i$$

where:

X_i = the fraction of total heat input derived from each type of fuel (e.g. natural gas, bituminous coal, wood residue, etc.)

 F_i or $(F_c)_i$ = the applicable F or F_c factor for each fuel type determined in accordance with paragraphs (f)(4) and (f)(5) of this section.

n = the number of fuels being burned in combination.

[40 CFR 60.45(f)(1), (2), (3), (4), (5), & (6)]

E.37. Continuous monitors shall be installed and operated in accordance with 40 CFR 60.45 and 60.13. In addition, an ASTM-certified automatic solid fossil fuel sampler shall be installed which produces a representative daily sample for analysis of sulfur, moisture, heating value and ash. The solid fossil fuel data shall be used in conjunction with emissions factors and the continuous monitoring data to calculate SO₂ reduction.

[PSD-FL-008(B)]

Recordkeeping and Reporting Requirements

E.38. Excess emission and monitoring system performance reports shall be submitted to the Administrator for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c). The summary report form shall contain the information and be in the format shown in figure 1 (attached to this permit) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility. [40 CFR 60.7(d) & 60.45(g)]

PROPOSED Permit No.: 1050004-003-AV

- **E.39.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department 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 Department. Rule 62-210.700(6), F.A.C.]
- **E.40.** Submit to the Department a written report of emissions in excess of emission limiting 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. [Rule 62-213.440, F.A.C.]

E.41. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.

PROPOSED Permit No.: 1050004-003-AV

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

[Rule 62-297.310(8), F.A.C.]

Miscellaneous Requirements.

E.42. The permittee shall comply with the requirements contained in Appendix 40 CFR 60, Subpart A, attached to this permit.

[Rule 62-204.800(7)(d), F.A.C.]

E.43. The City shall maintain and submit to the Department on an annual basis for a period of five years from the date that the unit is initially co-fired with petroleum coke, information demonstration in accordance with 40 CFR 52.21(b)(33) and 40 CFR 52.21(b)(21)(v) that the operational changes did not result in emissions increases of carbon monoxide, nitrogen oxides, or sulfuric acid mist. [PSD-FL-008(B)]

PROPOSED Permit No.: 1050004-003-AV

Section IV. This section is the Acid Rain Part.

Operated by: Lakeland Electric & Water Utilities

ORIS code: 676

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		
-001	Boiler - McIntosh Unit 1		
-005	Boiler - McIntosh Unit 2		
-006	Boiler - McIntosh Unit 3		

A.1. The Phase II permit application(s) submitted for this facility, as approved by the Department, are 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 below:

a. 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.]

PROPOSED Permit No.: 1050004-003-AV

A.2. Sulfur dioxide (SO₂) allowance allocations and nitrogen oxide (NO_x) requirements for each Acid Rain unit is as follows:

E.U. ID No.	EPA ID	Year	2000	2001	2002
-001	No. 01	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	897*	897*	897*
-005	No. 02	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	1019*	1019*	1019*
-006	No. 03	SO2 allowances, under Table 2 or 3 of 40 CFR Part 73	9848*	9848*	9848*
		NOx limit	**	**	**

^{*} 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 increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(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)1., 2. & 3., F.A.C.]
- A.4. <u>Fast-Track Revisions of Acid Rain Parts.</u> 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.

[Rules 62-213.413 and 62-214.370(4), F.A.C.]

- A.5. <u>Statement of Compliance</u>. 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.]
- A.6. Comments, notes, and justifications: None.

^{**} If applicable, by January 1, 1999, this Part will be reopened to add NOx requirements in accordance with the regulations implementing section 407 of the Clean Air Act.

PROPOSED Permit No.: 1050004-003-AV

Subsection B. This subsection addresses Acid Rain, Phase I.

{Permitting note: The U.S. EPA issues Acid Rain Phase I permit(s)}

The emissions unit listed below is regulated under Acid Rain Part, Phase I, for Lakeland Electric & Water Utilities, C. D. McIntosh, Jr. Power Plant, Facility ID No.: 1050004, ORIS code: 676

E.U.

ID No. Brief Description

-006 Boiler - McIntosh Unit 3

The provisions of the federal Acid Rain, Phase I permit(s), including Early Election Plans for NO_X, govern(s) the above listed emissions unit(s) through December 31, 1999. The provisions of the Phase II permit govern(s) those emissions unit(s) from January 1, 2000 through the expiration date of this Title V permit. The Phase II permit governs all other affected units for the effective period of this permit.

- **B.1.** The owners and operators of these Phase I acid rain unit(s) must comply with the standard requirements and special provisions set forth in the permit(s) listed below:
- a. Phase I permit dated 03/27/97. [Chapter 62-213, F.A.C.]
- **B.2.** Comments, notes, and justifications: none

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

Lakeland Electric & Water Utilities PROPOSED Permit No.: 1050004-003-AV C. D. McIntosh, Jr. Power Plant Facility ID No.: 1050004

<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
-xxx	Tanks with greater than 10,000 gallon capacity installed prior to July 23, 1984
-xxx	Diesel drive coal tunnel sump engine
-xxx	Fire water UPS diesel No. 31
-xxx	Fire water UPS diesel No. 32
-xxx	CT startup diesel engine
-xxx	General purpose diesel engines
-xxx	Emergency generators
-xxx	General purpose painting
-xxx	Parts Cleaning
-xxx	Sand Blasting (Maintenance only)
-xxx	Wastewater Treatment Tank
-xxx	Three Cooling Towers (Unit 2 and 3)
-xxx	Northside Waste Water Treatment Facility - Wastewater treatment processes and tanks
-xxx	Northside Waste Water Treatment Facility - Two emergency diesel generators
-xxx	Northside Waste Water Treatment Facility - Chemical and petroleum storage
-xxx	Northside Waste Water Treatment Facility - Miscellaneous activities
-XXX	Coal processing and conveying system
-xxx	Coal storage system
-xxx	Coal transfer and loading system
-xxx	Limestone handling and storage system
-xxx	Flyash handling and storage system

[electronic file name: 1050004u.doc]

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

Lakeland Electric & Water Utilities

C. D. McIntosh, Jr. Power Plant

PROPOSED Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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. Diesel Storage Tank (T-021)
- 2. Heavy Oil Tank (T-113)
- 3. Heavy Oil Tank (T-114)
- 4. Heavy Oil Tank (T-115)
- 5. Used Oil Tank (T-116)
- 6. Comfort Heating <1 MMBtu/hr
- 7. Non-Industrial Vacuum Cleaning
- 8. Refrigeration Units
- 9. Vacuum Pumps for Labs
- 10. Steam Cleaning Equipment
- 11. Sanders <5 square feet
- 12. Space Heating Equipment; non-boilers
- 13. Bakery Ovens
- 14. Lab Equipment
- 15. Brazing, Soldering, or Welding
- 16. Laundry Dryers
- 17. Fire and Safety Equipment
- 18. Surface Coating <5% VOC

[electronic file name: 1050004g.doc]

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97)

[Note: This attachment includes "canned conditions" developed from the "Title V Core List."]

{Permitting note: APPENDIX TV-1, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate.}

Chapter 62-4, F.A.C.

1. Not federally enforceable. General Prohibition. Any stationary installation which will reasonably be expected to be a source of pollution shall not be operated, maintained, or modified without the appropriate and valid permits issued by the Department, unless the source is exempted by Department rule. The Department may issue a permit only after it receives reasonable assurance that the installation will not cause pollution in violation of any of the provisions of Chapter 403, F.S., or the rules promulgated thereunder. A permitted installation may only be operated, maintained, constructed, expanded or modified in a manner that is consistent with the terms of the permit.

[Rule 62-4.030, Florida Administrative Code (F.A.C.); Section 403.087, Florida Statute (F.S.)]

- 2. Not federally enforceable. Procedure to Obtain Permits; Application.
- (1) Any person desiring to obtain a permit from the Department shall apply on forms prescribed by the Department and shall submit such additional information as the Department by law may require.
- (2) All applications and supporting documents shall be filed in quadruplicate with the Department.
- (3) To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S. All applications for a Department permit shall be certified by a professional engineer registered in the State of Florida except when the application is for renewal of an air pollution operation permit at a minor facility as defined in Rule 62-210.200, F.A.C., or where professional engineering is not required by Chapter 471, F.S. Where required by Chapter 471 or 492, F.S., applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.
- (4) Processing fees for air construction permits shall be in accordance with Rule 62-4.050(4), F.A.C.
- (5)(a) To be considered by the Department, each application must be accompanied by the proper processing fee. The fee shall be paid by check, payable to the Department of Environmental Protection. The fee is non-refundable except as provided in Section 120.60, F.S., and in this section.
 - (c) Upon receipt of the proper application fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin.
 - (d) If the applicant does not submit the required fee within ten days of receipt of written notification, the Department shall either return the unprocessed application or arrange with the applicant for the pick up of the application.
 - (e) If an applicant submits an application fee in excess of the required fee, the permit processing time requirements of Sections 120.60(2) and 403.0876, F.S., shall begin upon receipt, and the Department shall refund to the applicant the amount received in excess of the required fee.
- (6) Any substantial modification to a complete application shall require an additional processing fee determined pursuant to the schedule set forth in Rule 62-4.050, F.A.C., and shall restart the time requirements of Sections 120.60 and 403.0876, F.S. For purposes of this Subsection, the term "substantial modification" shall mean a modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review.
- (7) Modifications to existing permits proposed by the permittee which require substantial changes in the existing permit or require substantial evaluation by the Department of potential impacts of the proposed modifications shall require the same fee as a new application.

[Rule 62-4.050, F.A.C.]

3. <u>Standards for Issuing or Denving Permits</u>. Except as provided at Rule 62-213.460, F.A.C., the issuance of a permit does not relieve any person from complying with the requirements of Chapter 403, F.S., or Department rules. [Rule 62-4.070(7), F.A.C.]

4. Modification of Permit Conditions.

- (1) For good cause and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions and on application of the permittee the Department may grant additional time. For the purpose of this section, good cause shall include, but not be limited to, any of the following:
 - (a) A showing that an improvement in effluent or emission quality or quantity can be accomplished because of technological advances without unreasonable hardship.
 - (b) A showing that a higher degree of treatment is necessary to effect the intent and purpose of Chapter 403, F.S.
 - (c) A showing of any change in the environment or surrounding conditions that requires a modification to conform to applicable air or water quality standards.
 - (e) Adoption or revision of Florida Statutes, rules, or standards which require the modification of a permit condition for compliance.
- (2) A permittee may request a modification of a permit by applying to the Department.
- (3) A permittee may request that a permit be extended as a modification of the permit. Such a request must be submitted to the Department in writing before the expiration of the permit. Upon timely submittal of a request for extension, unless the permit automatically expires by statute or rule, the permit will remain in effect until final agency action is taken on the request. For construction permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that, upon completion, the extended permit will comply with the standards and conditions required by applicable regulation. For all other permits, an extension shall be granted if the applicant can demonstrate reasonable assurances that the extended permit will comply with the standards and conditions applicable to the original permit. A permit for which the permit application fee was prorated in accordance with Rule 62-4.050(4)(1), F.A.C., shall not be extended. In no event shall a permit be extended or remain in effect longer than the time limits established by statute or rule.

[Rule 62-4.080, F.A.C.]

5. Renewals. Prior to one hundred eighty (180) days before the expiration of a permit issued pursuant to Chapter 62-213, F.A.C., the permittee shall apply for a renewal of a permit using forms incorporated by reference in the specific rule chapter for that kind of permit. A renewal application shall be timely and sufficient. If the application is submitted prior to 180 days before expiration of the permit, it will be considered timely and sufficient. If the renewal application is submitted at a later date, it will not be considered timely and sufficient unless it is submitted and made complete prior to the expiration of the operation permit. When the application for renewal is timely and sufficient, the existing permit shall remain in effect until the renewal application has been finally acted upon by the Department or, if there is court review of the Department's final agency action, until a later date is required by Section 120.60, F.S., provided that, for renewal of a permit issued pursuant to Chapter 62-213, F.A.C., the applicant complies with the requirements of Rules 62-213.420(1)(b)3. and 4., F.A.C.

[Rule 62-4.090(1), F.A.C.]

Suspension and Revocation.

- (1) Permits shall be effective until suspended, revoked, surrendered, or expired and shall be subject to the provisions of Chapter 403, F.S., and rules of the Department.
- (2) Failure to comply with pollution control laws and rules shall be grounds for suspension or revocation.
- (3) A permit issued pursuant to Chapter 62-4, F.A.C., shall not become a vested property right in the permittee. The Department may revoke any permit issued by it if it finds that the permit holder or the permit holder's agent:
 - (a) Submitted false or inaccurate information in application or operational reports.
 - (b) Has violated law, Department orders, rules or permit conditions.
 - (c) Has failed to submit operational reports or other information required by Department rules.
 - (d) Has refused lawful inspection under Section 403.091, F.S.

[Rule 62-4.100, F.A.C.]

7. Not federally enforceable. Financial Responsibility. The Department may require an applicant to submit proof of financial responsibility and may require the applicant to post an appropriate bond to guarantee compliance with the law and Department rules. [Rule 62-4.110, F.A.C.]

8. Transfer of Permits.

- (1) Within 30 days after the sale or legal transfer of a permitted facility, an "Application for Transfer of Permit" (DEP Form 62-1.201(1)) must be submitted to the Department. This form must be completed with the notarized signatures of both the permittee and the proposed new permittee.
- (2) The Department shall approve the transfer of a permit unless it determines that the proposed new permittee cannot provide reasonable assurances that conditions of the permit will be met. The determination shall be limited solely to the ability of the new permittee to comply with the conditions of the existing permit, and it shall not concern the adequacy of these permit conditions. If the Department proposes to deny the transfer, it shall provide both the permittee and the proposed new permittee a written objection to such transfer together with notice of a right to request a Chapter 120, F.S., proceeding on such determination.
- (3) Within 30 days of receiving a properly completed Application for Transfer of Permit form, the Department shall issue a final determination. The Department may toll the time for making a determination on the transfer by notifying both the permittee and the proposed new permittee that additional information is required to adequately review the transfer request. Such notification shall be served within 30 days of receipt of an Application for Transfer of Permit form, completed pursuant to Rule 62-4.120(1). F.A.C. If the Department fails to take action to approve or deny the transfer within 30 days of receipt of the completed Application for Transfer of Permit form, or within 30 days of receipt of the last item of timely requested additional information, the transfer shall be deemed approved.
- (4) The permittee is encouraged to apply for a permit transfer prior to the sale or legal transfer of a permitted facility. However, the transfer shall not be effective prior to the sale or legal transfer.
- (5) Until this transfer is approved by the Department, the permittee and any other person constructing, operating, or maintaining the permitted facility shall be liable for compliance with the terms of the permit. The permittee transferring the permit shall remain liable for corrective actions that may be required as a result of any violations occurring prior to the sale or legal transfer of the facility.

[Rule 62-4.120, F.A.C.]

- 9. <u>Plant Operation-Problems</u>. If the permittee is temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by hazard of fire, wind or by other cause, the permittee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. [Rule 62-4.130, F.A.C.]
- 10. For purposes of notification to the Department pursuant to Rule 62-4.130, F.A.C., Plant Operation-Problems, "immediately" shall mean the same day, if during a workday (i.e., 8:00 a.m. 5:00 p.m.), or the first business day after the incident, excluding weekends and holidays.

[40 CFR 70.6(a)(3)(iii)(B)]

11. Not federally enforceable. Review. Failure to request a hearing within 14 days of receipt of notice of proposed or final agency action on a permit application or as otherwise required in Chapter 62-103, F.A.C., shall be deemed a waiver of the right to an administrative hearing.

[Rule 62-4.150, F.A.C.]

- 12. Permit Conditions. All permits issued by the Department shall include the following general conditions:
- (1) The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- (2) This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- (3) As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

- (4) This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- (5) This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of F.S. and Department rules, unless specifically authorized by an order from the Department.
- (6) The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- (7) The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - (a) Have access to and copy any records that must be kept under conditions of the permit;
 - (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and,
 - (c) Sample or monitor any substances or parameters at any location reasonable necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
- (8) If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - (a) A description of and cause of noncompliance; and,
 - (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
- (9) In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- (10) The permittee agrees to comply with changes in Department rules and F.S. after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by F.S. or Department rules.
- (11) This permit is transferable only upon Department approval in accordance with Rule 62-4.120, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- (12) This permit or a copy thereof shall be kept at the work site of the permitted activity.
- (14) The permittee shall comply with the following:
 - (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least five (5) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - (c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used; and,
 - 6. the results of such analyses.
- (15) When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly. [Rules 62-4.160 and 62-213.440(1)(b), F.A.C.]

13. Construction Permits.

- (1) No person shall construct any installation or facility which will reasonably be expected to be a source of air or water pollution without first applying for and receiving a construction permit from the Department unless exempted by statute or Department rule. In addition to the requirements of Chapter 62-4, F.A.C., applicants for a Department Construction Permit shall submit the following as applicable:
 - (a) A completed application on forms furnished by the Department.
 - (b) An engineering report covering:
 - 1. plant description and operations,
 - 2. types and quantities of all waste material to be generated whether liquid, gaseous or solid,
 - 3. proposed waste control facilities,
 - 4. the treatment objectives,
 - 5. the design criteria on which the control facilities are based, and,
 - 6. other information deemed relevant.

Design criteria submitted pursuant to Rule 62-4.210(1)(b)5., F.A.C., shall be based on the results of laboratory and pilot-plant scale studies whenever such studies are warranted. The design efficiencies of the proposed waste treatment facilities and the quantities and types of pollutants in the treated effluents or emissions shall be indicated. Work of this nature shall be subject to the requirements of Chapter 471, F.S. Where confidential records are involved, certain information may be kept confidential pursuant to Section 403.111, F.S.

- (c) The owners' written guarantee to meet the design criteria as accepted by the Department and to abide by Chapter 403, F.S. and the rules of the Department as to the quantities and types of materials to be discharged from the installation. The owner may be required to post an appropriate bond or other equivalent evidence of financial responsibility to guarantee compliance with such conditions in instances where the owner's financial resources are inadequate or proposed control facilities are experimental in nature.
- (2) The construction permit may contain conditions and an expiration date as determined by the Secretary or the Secretary's designee.
- (3) When the Department issues a permit to construct, the permittee shall be allowed a period of time, specified in the permit, to construct, and to operate and test to determine compliance with Chapter 403, F.S., and the rules of the Department and, where applicable, to apply for and receive an operation permit. The Department may require tests and evaluations of the treatment facilities by the permittee at his/her expense.

[Rule 62-4.210, F.A.C.]

14. Not federally enforceable. Operation Permit for New Sources. To properly apply for an operation permit for new sources, the applicant shall submit certification that construction was completed noting any deviations from the conditions in the construction permit and test results where appropriate.

[Rule 62-4.220, F.A.C.]

Chapter 62-103, F.A.C.

- 15. <u>Public Notice, Public Participation, and Proposed Agency Action.</u> The permittee shall comply with all of the requirements for public notice, public participation, and proposed agency action pursuant to Rule 62-103.150 and Rule 62-210.350, F.A.C. [Rules 62-103.150, 62-210.350 and 62-213.430(1)(b), F.A.C.]
- 16. <u>Administrative Hearing</u>. The permittee shall comply with all of the requirements for a petition for administrative hearing or waiver of right to administrative proceeding pursuant to Rule 61-103.155, F.A.C. [Rule 62-103.155, F.A.C.]

Chapter 62-204, F.A.C.

17. Asbestos. This permit does not authorize any demolition or renovation of the facility or its parts or components which involves asbestos removal. This permit does not constitute a waiver of any of the requirements of Chapter 62-257, F.A.C., and 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos, adopted and incorporated by reference in Rule 62-204.800, F.A.C. Compliance with Chapter 62-257, F.A.C., and 40 CFR 61, Subpart M, Section 61.145, is required for any asbestos demolition or renovation at the source.

[40 CFR 61; Rule 62-204.800, F.A.C.; and, Chapter 62-257, F.A.C.]

Chapter 62-210, F.A.C.

- 18. Permits Required. The owner or operator of any emissions unit which emits or can reasonably be expected to emit any air pollutant shall obtain an appropriate permit from the Department prior to beginning construction, modification, or initial or continued operation of the emissions unit unless exempted pursuant to Department rule or statute. All emissions limitations, controls, and other requirements imposed by such permits shall be at least as stringent as any applicable limitations and requirements contained in or enforceable under the State Implementation Plan (SIP) or that are otherwise federally enforceable. Except as provided at Rule 62-213.460, F.A.C., issuance of a permit does not relieve the owner or operator of an emissions unit from complying with any applicable requirements, any emission limiting standards or other requirements of the air pollution rules of the Department or any other such requirements under federal, state, or local law.
- (1) Air Construction Permits. An air construction permit shall be obtained by the owner or operator of any proposed new or modified facility or emissions unit prior to the beginning of construction or modification, in accordance with all applicable provisions of Chapters 62-210, 62-212 and 62-4, F.A.C. The construction permit shall be issued for a period of time sufficient to allow construction or modification of the facility or emissions unit and operation while the new or modified facility or emissions unit is conducting tests or otherwise demonstrating initial compliance with the conditions of the construction permit.
- (2) Air Operation Permits. Upon expiration of the air operation permit for any existing facility or emissions unit, subsequent to construction or modification and demonstration of initial compliance with the conditions of the construction permit for any new or modified facility or emissions unit, or as otherwise provided in Chapter 62-210 or Chapter 62-213, the owner or operator of such facility or emissions unit shall obtain a renewal air operation permit, an initial air operation permit, or an administrative correction or revision of an existing air operation permit, whichever is appropriate, in accordance with all applicable provisions of Chapter 62-210, Chapter 62-213, and Chapter 62-4, F.A.C.
 - (a) Minimum Requirements for All Air Operation Permits. At a minimum, a permit issued pursuant to this subsection shall:
 - 1. Specify the manner, nature, volume and frequency of the emissions permitted, and the applicable emission limiting standards or performance standards, if any;
 - 2. Require proper operation and maintenance of any pollution control equipment by qualified personnel, where applicable in accordance with the provisions of any operation and maintenance plan required by the air pollution rules of the Department.
 - 3. Contain an effective date stated in the permit which shall not be earlier than the date final action is taken on the application and be issued for a period, beginning on the effective date, as provided below.
 - a. The operation permit for an emissions unit which is in compliance with all applicable rules and in operational condition, and which the owner or operator intends to continue operating, shall be issued or renewed for a five-year period, except that, for Title V sources subject to Rule 62-213.420(1)(a)1., F.A.C., operation permits shall be extended until 60 days after the due date for submittal of the facility's Title V permit application as specified in Rule 62-213.420(1)(a)1., F.A.C.
 - b. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for six months or more prior to the expiration date of the current operation permit, shall be renewed for a period not to exceed five years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided:
 - (i) the owner or operator of the emissions unit demonstrates to the Department that the emissions unit may need to be reactivated and used, or that it is the owner's or operator's intent to apply to the Department for a permit to construct a new emissions unit at the facility before the end of the extension period; and.
 - (ii) the owner or operator of the emissions unit agrees to and is legally prohibited from providing the allowable emission permitted by the renewed permit as an emissions offset to any other person under Rule 62-212.500, F.A.C.; and,
 - (iii) the emissions unit was operating in compliance with all applicable rules as of the time the source was shut down.
 - c. Except as provided in Rule 62-210.300(2)(a)3.d., F.A.C., the operation permit for an emissions unit which has been shut down for five years or more prior to the expiration date of the current operation permit shall be renewed for a maximum period not to exceed ten years from the date of shutdown, even if the emissions unit is not maintained in operational condition, provided the conditions given in Rule 62-210.300(2)(a)3.b., F.A.C., are met and the owner or operator demonstrates to the Department that failure to renew the permit would constitute a hardship, which may include economic hardship.

- d. The operation permit for an electric utility generating unit on cold standby or long-term reserve shutdown shall be renewed for a five-year period, and additional five-year periods, even if the unit is not maintained in operational condition, provided the conditions given in Rules 62-210.300(2)(a)3.b.(i) through (iii), F.A.C., are met.
- 4. In the case of an emissions unit permitted pursuant to Rules 62-210.300(2)(a)3.b., c., and d., F.A.C., include reasonable notification and compliance testing requirements for reactivation of such emissions unit and provide that the owner or operator demonstrate to the Department prior to reactivation that such reactivation would not constitute reconstruction pursuant to Rule 62-204.800(7), F.A.C.

[Rules 62-210.300(1) & (2), F.A.C.]

- 19. Not federally enforceable. <u>Notification of Startup</u>. The owner or operator of any emissions unit or facility which has a valid air operation permit and which has been shut down more than one (1) year, shall notify the Department in writing of the intent to start up such emissions unit or facility, a minimum of sixty (60) days prior to the intended startup date.
 - (a) The notification shall include the planned startup date, anticipated emission rates or pollutants released, changes to processes or control devices which will result in changes to emission rates, and any other conditions which may differ from the valid outstanding operation permit.
 - (b) If, due to an emergency, a startup date is not known 60 days prior thereto, the owner shall notify the Department as soon as possible after the date of such startup is ascertained.

[Rule 62-210.300(5), F.A.C.]

20. Emissions Unit Reclassification.

- (a) Any emissions unit whose operation permit has been revoked as provided for in Chapter 62-4, F.A.C., shall be deemed permanently shut down for purposes of Rule 62-212.500, F.A.C. Any emissions unit whose permit to operate has expired without timely renewal or transfer may be deemed permanently shut down, provided, however, that no such emissions unit shall be deemed permanently shut down if, within 20 days after receipt of written notice from the Department, the emissions unit owner or operator demonstrates that the permit expiration resulted from inadvertent failure to comply with the requirements of Rule 62-4.090, F.A.C., and that the owner or operator intends to continue the emissions unit in operation, and either submits an application for an air operation permit or complies with permit transfer requirements, if applicable.
- (b) If the owner or operator of an emissions unit which is so permanently shut down, applies to the Department for a permit to reactivate or operate such emissions unit, the emissions unit will be reviewed and permitted as a new emissions unit. [Rule 62-210.300(6), F.A.C.]

21. Public Notice and Comment.

- (1) Public Notice of Proposed Agency Action.
 - (a) Notwithstanding any discretionary public notice requirements contained in Rule 62-103.150(2)(a), F.A.C., a notice of proposed agency action on permit application, where the proposed agency action is to issue the permit, shall be published by any applicant for:
 - 1. An air construction permit;
 - 2. An air operation permit, permit renewal or permit revision subject to Rule 62-210.300(2)(b), F.A.C., (i.e., a FESOP), except as provided in Rule 62-210.300(2)(b)1.b., F.A.C.; or
 - 3. An air operation permit, permit renewal, or permit revision subject to Chapter 62-213, F.A.C., except those permit revisions meeting the requirements of Rule 62-213.412(1), F.A.C.
 - (b) The notice required by Rule 62-210.350(1)(a), F.A.C., shall be published in accordance with all otherwise applicable provisions of Rule 62-103.150, F.A.C.
- (2) Additional Public Notice Requirements for Emissions Units Subject to Prevention of Significant Deterioration or Nonattainment-Area Preconstruction Review.
 - (a) Before taking final agency action on a construction permit application for any proposed new or modified facility or emissions unit subject to the preconstruction review requirements of Rule 62-212.400 or 62-212.500, F.A.C., the Department shall comply with all applicable provisions of Rule 62-103.150, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:
 - 1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S., and the Department's analysis of the effect of the proposed construction or modification on ambient air quality, including the Department's preliminary determination of whether the permit should be approved or disapproved;
 - 2. A 30-day period for submittal of public comments; and,

- 3. A notice, by advertisement in a newspaper of general circulation in the county affected, specifying the nature and location of the proposed facility or emissions unit, whether BACT or LAER has been determined, the degree of PSD increment consumption expected, if applicable, and the location of the information specified in paragraph 1, above; and notifying the public of the opportunity for submitting comments and requesting a public hearing.
- (b) The notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-103.150, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.
- (c) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall also be sent by the Department to the Regional Office of the U. S. Environmental Protection Agency and to all other state and local officials or agencies having cognizance over the location of such new or modified facility or emissions unit, including local air pollution control agencies, chief executives of city or county government, regional land use planning agencies, and any other state, Federal Land Manager, or Indian Governing Body whose lands may be affected by emissions from the new or modified facility or emissions unit.
- (d) A copy of the notice provided for in Rule 62-210.350(2)(a)3., F.A.C., shall be displayed in the appropriate district, branch and local program offices.
- (e) An opportunity for public hearing shall be provided in accordance with Chapter 120, F.S., and Rule 62-103.150, F.A.C.
- (f) Any public comments received shall be made available for public inspection in the location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., is available and shall be considered by the Department in making a final determination to approve or deny the permit.
- (g) The final determination shall be made available for public inspection at the same location where the information specified in Rule 62-210.350(2)(a)1., F.A.C., was made available.
- (h) For a proposed new or modified emissions unit which would be located within 100 kilometers of any Federal Class I area or whose emissions may affect any Federal Class I area, and which would be subject to the preconstruction review requirements of Rule 62-212.400, F.A.C., or Rule 62-212.500, F.A.C.:
 - 1. The Department shall mail or transmit to the Administrator a copy of the initial application for an air construction permit and notice of every action related to the consideration of the permit application.
 - 2. The Department shall mail or transmit to the Federal Land Manager of each affected Class I area a copy of any written notice of intent to apply for an air construction permit; the initial application for an air construction permit, including all required analyses and demonstrations; any subsequently submitted information related to the application; the preliminary determination and notice of proposed agency action on the permit application; and any petition for an administrative hearing regarding the application or the Department's proposed action. Each such document shall be mailed or transmitted to the Federal Land Manager within fourteen (14) days after its receipt by the Department.
- (3) Additional Public Notice Requirements for Facilities Subject to Operation Permits for Title V Sources.
 - (a) Before taking final agency action to issue a new, renewed, or revised air operation permit subject to Chapter 62-213, F.A.C., the Department shall comply with all applicable provisions of Rule 62-103.150, F.A.C., and provide an opportunity for public comment which shall include as a minimum the following:
 - 1. A complete file available for public inspection in at least one location in the district affected which includes the information submitted by the owner or operator, exclusive of confidential records under Section 403.111, F.S.; and,
 - 2. A 30-day period for submittal of public comments.
 - (b) The notice provided for in Rule 62-210.350(3)(a), F.A.C., shall be prepared by the Department and published by the applicant in accordance with all applicable provisions of Rule 62-103.150, F.A.C., except that the applicant shall cause the notice to be published no later than thirty (30) days prior to final agency action.
 - (c) The notice shall identify:
 - 1. The facility;
 - 2. The name and address of the office at which processing of the permit occurs;
 - 3. The activity or activities involved in the permit action;
 - 4. The emissions change involved in any permit revision;
 - 5. The name, address, and telephone number of a Department representative from whom interested persons may obtain additional information, including copies of the permit draft, the application, and all relevant supporting materials, including any permit application, compliance plan, permit, monitoring report, and compliance statement required pursuant to Chapter 62-213, F.A.C. (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), and all other materials available to the Department that are relevant to the permit decision;
 - 6. A brief description of the comment procedures required by Rules 62-103.150 and 62-210.350(3), F.A.C.;
 - 7. The time and place of any hearing that may be held, including a statement of procedure to request a hearing (unless a hearing has already been scheduled); and,

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

8. The procedures by which persons may petition the Administrator to object to the issuance of the proposed permit after expiration of the Administrator's 45-day review period.

[Rule 62-210.350, F.A.C.]

22. Administrative Permit Corrections.

- (1) A facility owner shall notify the Department by letter of minor corrections to information contained in a permit. Such notifications shall include:
 - (a) Typographical errors noted in the permit;
 - (b) Name, address or phone number change from that in the permit;
 - (c) Any other similar minor administrative change at the source; and,
 - (d) A change requiring more frequent monitoring or reporting by the permittee.
 - (e) Changes listed at 40 CFR 72.83(a)(1), (2), (6), (9) and (10), hereby adopted and incorporated by reference, to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-76510;
 - (f) Changes listed at 40 CFR 72.83(a)(11), hereby adopted and incorporated by reference, to Title V sources subject to emissions limitations or reductions pursuant to 42 USC ss. 7651-76510, provided the notification is accompanied by a copy of any EPA determination concerning the similarity of the change to those listed at Rule 17-210.360(1)(e).
- (2) Upon receipt of such notifications the Department shall within 60 days correct the permit and provide a corrected copy to the owner.
- (3) For facilities subject to Chapter 62-213, F.A.C., a copy shall be provided to EPA and any approved local air program in the county where the facility or any part of the facility is located.
- (4) The Department shall incorporate requirements resulting from issuance of new or revised construction permits into existing operation permits issued pursuant to Chapter 62-213, F.A.C., if the construction permit revisions incorporate requirements of federally enforceable preconstruction review and if the applicant requests at the time of application that all of the requirements of Rule 62-213.430(1), F.A.C., be complied with in conjunction with the processing of the construction permit application. [Rule 62-210.360, F.A.C.]

23. Reports.

- (3) Annual Operating Report for Air Pollutant Emitting Facility.
 - (a) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year.
 - (c) The annual operating report shall be submitted to the appropriate Department District or Department approved local air pollution control program office by March 1 of the following year unless otherwise indicated by permit condition or Department request.

[Rule 62-210.370(3), F.A.C.]

- 24. <u>Circumvention</u>. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly.

 [Rule 62-210.650, F.A.C.]
- 25. Forms and Instructions. The forms used by the Department in the stationary source control program are adopted and incorporated by reference in this section. The forms are listed by rule number, which is also the form number, with the subject, title and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.
- (1) Application for Air Permit Long Form, Form and Instructions.
 - (a) Acid Rain Part (Phase II), Form and Instructions.
 - 1. Repowering Extension Plan, Form and Instructions.
 - 2. New Unit Exemption, Form and Instructions.
 - 3. Retired Unit Exemption, Form and Instructions.
 - (b) Reserved.
- (5) Annual Operating Report (AOR) for Air Pollutant Emitting Facility, Form and Instructions. [Rule 62-210.900, F.A.C.]

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

Chapter 62-213, F.A.C.

26. Annual Emissions Fee. Each Title V source permitted to operate in Florida must pay between January 15 and March 1 of each year, upon written notice from the Department, an annual emissions fee in accordance with Rule 62-213.205, F.A.C., and the appropriate form and associated instructions.

[Rules 62-213.205 and 62-213.900(1), F.A.C.]

- 27. Annual Emissions Fee. Failure to pay timely any required annual emissions fee, penalty, or interest constitutes grounds for permit revocation pursuant to Rule 62-4.100, F.A.C. [Rule 62-213.205(1)(g), F.A.C.]
- 28. <u>Annual Emissions Fee</u>. Any documentation of actual hours of operation, actual material or heat input, actual production amount, or actual emissions used to calculate the annual emissions fee shall be retained by the owner for a minimum of five (5) years and shall be made available to the Department upon request. [Rule 62-213.205(1)(j), F.A.C.]
- 29. <u>Annual Emissions Fee</u>. DEP Form 62-213.900(1), F.A.C., "Major Air Pollution Source Annual Emissions Fee Form", must be completed by the permittee and submitted with the annual emissions fee. [Rule 62-213.205(4), F.A.C.]
- 30. <u>Air Operation Permit Fees.</u> After December 31, 1992, no permit application processing fee, renewal fee, modification fee or amendment fee is required for an operation permit for a Title V source. [Rule 62-213.205(5), F.A.C.]
- 31. <u>Permits and Permit Revisions Required</u>. All Title V sources are subject to the permit requirements of Chapter 62-213, F.A.C. [Rule 62-213.400, F.A.C.]
- 32. No Title V source may operate except in compliance with Chapter 62-213, F.A.C. [Rule 62-213.400(1), F.A.C.]
- 33. <u>Changes Without Permit Revision</u>. Title V sources having a valid permit issued pursuant to Chapter 62-213, F.A.C., may make the following changes without permit revision, provided that sources shall maintain source logs or records to verify periods of operation in each alternative method of operation:
- (1) Permitted sources may change among those alternative methods of operation allowed by the source's permit as provided by the terms of the permit;
- (2) Permitted sources may implement the terms or conditions of a new or revised construction permit if;
 - (a) The application for construction permit complied with the requirements of Rule 62-213.420(3) and (4), F.A.C.;
 - (b) The terms or conditions were subject to federally enforceable preconstruction review pursuant to Chapter 62-212, F.A.C.; and,
 - (c) The new or revised construction permit was issued after the Department and the applicant complied with all the requirements of Rule 62-213.430(1), F.A.C.;
- (3) A permitted source may implement operating changes after the source submits any forms required by any applicable requirement and provides the Department and EPA with at least 7 days written notice prior to implementation. The source and the Department shall attach each notice to the relevant permit;
 - (a) The written notice shall include the date on which the change will occur, and a description of the change within the permitted source, the pollutants emitted and any change in emissions, and any term or condition becoming applicable or no longer applicable as a result of the change;
 - (b) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes;
- (4) Permitted sources may implement changes involving modes of operation only in accordance with Rule 62-213.415, F.A.C. [Rule 62-213.410, F.A.C.]

34. Immediate Implementation Pending Revision Process.

- (1) Those permitted Title V sources making any change that constitutes a modification pursuant to paragraph (a) of the definition of modification at Rule 62-210.200, F.A.C., but which would not constitute a modification pursuant to paragraph (b) of the same definition, may implement such change prior to final issuance of a permit revision in accordance with Rule 62-213.412, F.A.C., provided the change:
 - (a) Does not violate any applicable requirement;
 - (b) Does not contravene any permit term or condition for monitoring, testing, recordkeeping or reporting, or any compliance certification requirement;
 - (c) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis under the provisions of Chapter 62-212 or 62-296, F.A.C.;
 - (d) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject including any federally enforceable emissions cap or federally enforceable alternative emissions limit.
- (2) A Title V source may immediately implement such changes after they have been incorporated into the terms and conditions of a new or revised construction permit issued pursuant to Chapter 62-212, F.A.C., and after the source provides to EPA, the Department, each affected state and any approved local air program having geographic jurisdiction over the source, a copy of the source's application for operation permit revision. The Title V source may conform its application for construction permit to include all information required by Rule 62-213.420, F.A.C., in lieu of submitting separate application forms.
- (3) The Department shall process the application for operation permit revision in accordance with the provisions of Chapter 62-213, F.A.C., except that the Department shall issue a draft permit revision or a determination to deny the revision within 60 days of receipt of a complete application for operation permit revision or, if the Title V source has submitted a construction permit application conforming to the requirements of Rule 62-213.420, F.A.C., the Department shall issue a draft permit or a determination to deny the revision at the same time the Department issues its determination on issuance or denial of the construction permit application. The Department shall not take final action until all the requirements of Rule 62-213.430(1)(a), (c), (d), and (e), F.A.C., have been complied with.
- (4) Pending final action on the operation permit revision application, the source shall implement the changes in accordance with the terms and conditions of the source's new or revised construction permit.
- (5) The permit shield described in Rule 62-213.460, F.A.C., shall not apply to such changes until after the Department takes final action to issue the operation permit revision.
- (6) If the Department denies the source's application for operation permit revision, the source shall cease implementation of the proposed changes.

[Rule 62-213.412, F.A.C.]

35. Permit Applications.

- (1) Duty to Apply. For each Title V source, the owner or operator shall submit a timely and complete permit application in compliance with the requirements of Rules 62-213.420, 62-4.050(1) & (2), and 62-210.900, F.A.C.
 - (a) Timely Application.
 - 3. For purposes of permit renewal, a timely application is one that is submitted in accordance with Rule 62-4.090, F.A.C.
 - (b) Complete Application.
 - 1. Any applicant for a Title V permit, permit revision or permit renewal must submit an application on DEP Form No. 62-210.900(1), which must include all the information specified by Rule 62-213.420(3), F.A.C., except that an application for permit revision must contain only that information related to the proposed change. The applicant shall include information concerning fugitive emissions and stack emissions in the application. Each application for permit, permit revision or permit renewal shall be certified by a responsible official in accordance with Rule 62-213.420(4), F.A.C.
 - 2. For those applicants submitting initial permit applications pursuant to Rule 62-213.420(1)(a)1., F.A.C., a complete application shall be an application that substantially addresses all the information required by the application form number 62-210.900(1), and such applications shall be deemed complete within sixty days of receipt of a signed and certified application unless the Department notifies the applicant of incompleteness within that time. For all other applicants, the applications shall be deemed complete sixty days after receipt, unless the Department, within sixty days after receipt of a signed application for permit, permit revision or permit renewal, requests additional documentation or information needed to process the application. An applicant making timely and complete application for permit, or timely application for permit renewal as described by Rule 62-4.090(1), F.A.C., shall continue to operate the source

under the authority and provisions of any existing valid permit or Florida Electrical Power Plant Siting Certification, provided the applicant complies with all the provisions of Rules 62-213.420(1)(b)3. and 4. F.A.C. Failure of the Department to request additional information within sixty days of receipt of a properly signed application shall not impair the Department's ability to request additional information pursuant to Rules 62-213.420(1)(b)3. and 4., F.A.C. 3. For those permit applications submitted pursuant to the provisions of Rule 62-213.420(1)(a)1., F.A.C., the Department shall notify the applicant if the Department becomes aware at any time during processing of the application that the application contains incorrect or incomplete information. The applicant shall submit the corrected or supplementary information to the Department within ninety days unless the applicant has requested and been granted additional time to submit the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days or such additional time as requested and granted shall render the application incomplete. 4. For all applications other than those addressed at Rule 62-213.420(1)(b)3., F.A.C., should the Department become aware, during processing of any application that the application contains incorrect information, or should the Department become aware, as a result of comment from an affected State, an approved local air program, EPA, or the public that additional information is needed to evaluate the application, the Department shall notify the applicant within 30 days. When an applicant becomes aware that an application contains incorrect or incomplete information, the applicant shall submit the corrected or supplementary information to the Department. If the Department notifies an applicant that corrected or supplementary information is necessary to process the permit, and requests a response, the applicant shall provide the information to the Department within ninety days of the Department request unless the applicant has requested and been granted additional time to submit the information or, the applicant shall, within ninety days, submit a written request that the Department process the application without the information. Failure of an applicant to submit corrected or supplementary information requested by the Department within ninety days, or such additional time as requested and granted, or to demand in writing within ninety days that the application be processed without the information shall render the application incomplete. Nothing in this section shall limit any other remedies available to the Department.

[Rules 62-213.420(1)(a)3. and 62-213.420(1)(b)1., 2., 3. & 4., F.A.C.]

- 36. <u>Confidential Information</u>. Whenever an applicant submits information under a claim of confidentiality pursuant to Section 403.111, F.S., the applicant shall also submit a copy of all such information and claim directly to EPA. [Rule 62-213.420(2), F.A.C.]
- 37. Standard Application Form and Required Information. Applications shall be submitted under Chapter 62-213, F.A.C., on forms provided by the Department and adopted by reference in Rule 62-210.900(1), F.A.C. The information as described in Rule 62-210.900(1), F.A.C., shall be included for the Title V source and each emissions unit. An application must include information sufficient to determine all applicable requirements for the Title V source and each emissions unit and to evaluate a fee amount pursuant to Rule 62-213.205, F.A.C.
 [Rule 62-213.420(3), F.A.C.]
- 38. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

[Rule 62-213.420(4), F.A.C.]

- 39. a. <u>Permit Renewal and Expiration</u>. Permits being renewed are subject to the same requirements that apply to permit issuance at the time of application for renewal. Permit renewal applications shall contain that information identified in Rules 62-210.900(1) and 62-213.420(3), F.A.C. Unless a Title V source submits a timely application for permit renewal in accordance with the requirements of Rule 62-4.090(1), F.A.C., the existing permit shall expire and the source's right to operate shall terminate.
 - b. <u>Permit Revision Procedures.</u> Permit revisions shall meet all requirements of Chapter 62-213, F.A.C., including those for content of applications, public participation, review by approved local programs and affected states, and review by EPA, as they apply to permit issuance and renewal, except that permit revisions for those activities implemented pursuant to Rule 62-213.412, F.A.C., need not meet the requirements of Rule 62-213.430(1)(b), F.A.C. The Department shall require permit revision in accordance with the provisions of Rule 62-4.080, F.A.C., and 40 CFR 70.7(f), whenever any source becomes

subject to any condition listed at 40 CFR 70.7(f)(1), hereby adopted and incorporated by reference. The below requirements from 40 CFR 70.7(f) are adopted and incorporated by reference in Rule 62-213.430(4), F.A.C.:

o 40 CFR 70.7(f): Reopening for Cause.

- (1) This section contains provisions from 40 CFR 70.7(f) that specify the conditions under which a Title V permit shall be reopened prior to the expiration of the permit. A Title V permit shall be reopened and revised under any of the following circumstances:
 - (i) Additional applicable requirements under the Act become applicable to a major Part 70 source with a remaining permit term of 3 or more years. Such a reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 40 CFR 70.4(b)(10)(i) or (ii).
 - (ii) Additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program. Upon approved by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit.
 - (iii) The permitting authority or EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
 - (iv) The Administrator or the permitting authority determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- (2) Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.
- (3) Reopenings under 40 CFR 70.7(f)(1) shall not be initiated before a notice of such intent is provided to the Part 70 source by the permitting authority at least 30 days in advance of the date that the permit is to be reopened, except that the permitting authority may provide a shorter time period in the case of an emergency.

[Rules 62-213.430(3) & (4), F.A.C.; and, 40 CFR 70.7(f)]

- 40. Insignificant Emissions Units or Pollutant-Emitting Activities.
 - (a) All requests for determination of insignificant emissions units or activities made pursuant to Rule 62-213.420(3)(m), F.A.C., shall be processed in conjunction with the permit, permit renewal or permit revision application submitted pursuant to Chapter 62-213, F.A.C. Insignificant emissions units or activities shall be approved by the Department consistent with the provisions of Rule 62-4.040(1)(b), F.A.C. Emissions units or activities which are added to a Title V source after issuance of a permit under Chapter 62-213, F.A.C., shall be incorporated into the permit at its next renewal, provided such emissions units or activities have been exempted from the requirement to obtain an air construction permit and also qualify as insignificant pursuant to Rule 62-213.430(6), F.A.C.
 - (b) An emissions unit or activity shall be considered insignificant if:
 - 1. Such unit or activity would be subject to no unit-specific applicable requirement;
 - 2. Such unit or activity, in combination with other units or activities proposed as insignificant, would not cause the facility to exceed any major source threshold(s) as defined in Rule 62-213.420(3)(c)1., F.A.C., unless it is acknowledged in the permit application that such units or activities would cause the facility to exceed such threshold(s); and
 - 3. Such unit or activity would not emit or have the potential to emit:
 - a. 500 pounds per year or more of lead and lead compounds expressed as lead;
 - b. 1,000 pounds per year or more of any hazardous air pollutant;
 - c. 2,500 pounds per year or more of total hazardous air pollutants; or
 - d. 5.0 tons per year or more of any other regulated pollutant.

[Rule 62-213.430(6), F.A.C.]

- 41. <u>Permit Duration</u>. Operation permits for Title V sources may not be extended as provided in Rule 62-4.080(3), F.A.C., if such extension will result in a permit term greater than five (5) years. [Rule 62-213.440(1)(a), F.A.C.]
- 42. <u>Monitoring Information</u>. All records of monitoring information shall specify the date, place, and time of sampling or measurement and the operating conditions at the time of sampling or measurement, the date(s) analyses were performed, the company or entity that performed the analyses, the analytical techniques or methods used, and the results of such analyses. [Rule 62-213.440(1)(b)2.a., F.A.C.]

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

43. Retention of Records. Retention of records of all monitoring data and support information shall be for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

[Rule 62-213.440(1)(b)2.b., F.A.C.]

- 44. <u>Monitoring Reports</u>. The permittee shall submit reports of any required monitoring at least every six (6) months. All instances of deviations from permit requirements must be clearly identified in such reports.

 [Rule 62-213.440(1)(b)3.a., F.A.C.]
- 45. <u>Deviation from Permit Requirements Reports</u>. The permittee shall report in accordance with the requirements of Rules 62-210.700(6) and 62-4.130, F.A.C., any deviations from permit requirements, including those attributable to upset conditions as defined in the permit. Reports shall include the probable cause of such deviations, and any corrective actions or preventive measures taken.

[Rule 62-213.440(1)(b)3.b., F.A.C.]

- 46. Reports. All reports shall be accompanied by a certification by a responsible official, pursuant to Rule 62-213.420(4), F.A.C. [Rule 62-213.440(1)(b)3.c, F.A.C.]
- 47. If any portion of the final permit is invalidated, the remainder of the permit shall remain in effect. [Rule 62-213.440(1)(d)1., F.A.C.]
- 48. It shall not be a defense for a permittee in an enforcement action that maintaining compliance with any permit condition would necessitate halting of or reduction of the source activity.

 [Rule 62-213.440(1)(d)3., F.A.C.]
- 49. A Title V source shall comply with all the terms and conditions of the existing permit until the Department has taken final action on any permit renewal or any requested permit revision, except as provided at Rule 62-213.412(2), F.A.C. [Rule 62-213.440(1)(d)4., F.A.C.]
- 50. A situation arising from sudden and unforeseeable events beyond the control of the source which causes an exceedance of a technology-based emissions limitation because of unavoidable increases in emissions attributable to the situation and which requires immediate corrective action to restore normal operation, shall be an affirmative defense to an enforcement action in accordance with the provisions and requirements of 40 CFR 70.6(g)(2) and (3), hereby adopted and incorporated by reference. [Rule 62-213.440(1)(d)5., F.A.C.]
- 51. <u>Confidentiality Claims.</u> Any permittee may claim confidentiality of any data or other information by complying with Rule 62-213.420(2), F.A.C.

[Rule 62-213.440(1)(d)6., F.A.C.]

52. Statement of Compliance. The permittee shall submit a statement of compliance with all terms and conditions of the permit. Such statement shall be submitted to the Department and EPA annually, or more frequently if specified by Rule 62-213.440(2), F.A.C., or by any other applicable requirement. The statement of compliance shall include the identity of each term or condition of the permit for which each unit has remained in compliance during the period covered by the statement. The statement shall include identification of all methods used to demonstrate compliance and identification of each term or condition of the permit for which any unit has not remained in compliance during the period covered by the statement. For each term or condition for which the source has not remained in compliance during the period covered by the statement, the statement shall also identify each unit not in compliance and each term and condition with which the unit was not in compliance and state the inclusive dates that the source was not in compliance. The actions taken to achieve compliance and the method used to demonstrate compliance. Such statement shall be accompanied by a certification by a responsible official, in accordance with Rule 62-213.420(4), F.A.C.

[Rule 62-213.440(3), F.A.C.]

- 53. Permit Shield. Except as provided in Chapter 62-213. F.A.C., compliance with the terms and conditions of a permit issued pursuant to Chapter 62-213, F.A.C., shall be deemed compliance with any applicable requirements in effect as of the date of permit issuance, provided that the source included such applicable requirements in the permit application. Nothing in Rule 62-213.460, F.A.C., or in any permit shall alter or affect the ability of EPA or the Department to deal with an emergency, the liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance, or the requirements of the Federal Acid Rain Program.

 [Rule 62-213.460, F.A.C.]
- 54. Forms and Instructions. The forms used by the Department in the Title V source operation program are adopted and incorporated by reference in Rule 62-213.900, F.A.C. The form is listed by rule number, which is also the form number, and with the subject, title, and effective date. Copies of forms may be obtained by writing to the Department of Environmental Protection, Division of Air Resources Management, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or by contacting the appropriate permitting authority.
- (1) Major Air Pollution Source Annual Emissions Fee (AEF) Form. [Rule 62-213.900(1), F.A.C.]

Chapter 62-256, F.A.C.

55. Not federally enforceable. Open Burning. This permit does not authorize any open burning nor does it constitute any waiver of the requirements of Chapter 62-256, F.A.C. Source shall comply with Chapter 62-256, F.A.C., for any open burning at the source.

[Chapter 62-256, F.A.C.]

Chapter 62-281, F.A.C.

- 56. <u>Refrigerant Requirements</u>. Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed at 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or Class II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts B and F, and with Rule 62-281.100, F.A.C. Those requirements include the following restrictions:
- (1) Any facility having any refrigeration equipment normally containing 50 (fifty) pounds of refrigerant, or more, must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added pursuant to 40 CFR 82.166;
- (2) No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided at 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved pursuant to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
- (3) No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or Class II substance at 40 CFR 82, Subpart A, Appendices A and B, except in compliance with Rule 62-281.100, F.A.C., and 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;
- (4) No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or Class II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined at 40 CFR 82.152) for service, maintenance or repair unless the person has been properly trained and certified pursuant to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance pursuant to 40 CFR 82.158 and unless the person observes the practices set forth at 40 CFR 82.156 and 40 CFR 82.166;
- (5) No person may dispose of appliances (except small appliances, as defined at 40 CFR 82.152) without using equipment certified for that type of appliance pursuant to 40 CFR 82.158 and without observing the practices set forth at 40 CFR 82.156 and 40 CFR 82.166.
- (6) No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined at 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82, Subpart F.
- [40 CFR 82; and, Chapter 62-281, F.A.C. (Chapter 62-281, F.A.C., is not federally enforceable)]

APPENDIX TV-1, TITLE V CONDITIONS (version dated 12/02/97) (continued)

Chapter 62-296, F.A.C.

- 57. Not federally enforceable until SIP approved. <u>Industrial, Commercial, and Municipal Open Burning Prohibited</u>. Open burning in connection with industrial, commercial, or municipal operations is prohibited, except when:
 - (a) Open burning is determined by the Department to be the only feasible method of operation and is authorized by an air permit issued pursuant to Chapter 62-210 or 62-213, F.A.C.; or
 - (b) An emergency exists which requires immediate action to protect human health and safety; or
 - (c) A county or municipality would use a portable air curtain incinerator to burn yard trash generated by a hurricane, tornado, fire or other disaster and the air curtain incinerator would otherwise be operated in accordance with the permitting exemption criteria of Rule 62-210.300(3), F.A.C.

[Rule 62-296.320(3), F.A.C.]

58. Unconfined Emissions of Particulate Matter.

- (4)(c)1. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any emissions unit whatsoever, including, but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrially related activities such as loading, unloading, storing or handling, without taking reasonable precautions to prevent such emission.
 - 3. Reasonable precautions may include, but shall not be limited to the following:
 - a. Paving and maintenance of roads, parking areas and yards.
 - b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
 - c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar emissions units.
 - d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the emissions unit to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
 - e. Landscaping or planting of vegetation.
 - f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
 - g. Confining abrasive blasting where possible.
 - h. Enclosure or covering of conveyor systems.
- 4. In determining what constitutes reasonable precautions for a particular facility, the Department shall consider the cost of the control technique or work practice, the environmental impacts of the technique or practice, and the degree of reduction of emissions expected from a particular technique or practice.

[Rules 62-296.320(4)(c)1., 3., & 4. F.A.C.]

[electronic file name: tv-1.doc]

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96)

Stack Sampling Facilities Provided by the Owner of an Emissions Unit. This section describes the minimum requirements for stack sampling facilities that are necessary to sample point emissions units. Sampling facilities include sampling ports, work platforms, access to work platforms, electrical power, and sampling equipment support. Emissions units must provide these facilities at their expense. All stack sampling facilities must meet any Occupational Safety and Health Administration (OSHA) Safety and Health Standards described in 29 CFR Part 1910, Subparts D and E.

(a) Permanent Test Facilities. The owner or operator of an emissions unit for which a compliance test, other than a visible emissions test, is required on at least an annual basis,

shall install and maintain permanent stack sampling facilities.

(b) Temporary Test Facilities. The owner or operator of an emissions unit that is not required to conduct a compliance test on at least an annual basis may use permanent or temporary stack sampling facilities. If the owner chooses to use temporary sampling facilities on an emissions unit, and the Department elects to test the unit, such temporary facilities shall be installed on the emissions unit within 5 days of a request by the Department and remain on the emissions unit until the test is completed.

(c) Sampling Ports.

1. All sampling ports shall have a minimum inside diameter of 3 inches.

2. The ports shall be capable of being sealed when not in use.

3. The sampling ports shall be located in the stack at least 2 stack diameters or equivalent diameters downstream and at least 0.5 stack diameter or equivalent diameter

upstream from any fan, bend, constriction or other flow disturbance.

- 4. For emissions units for which a complete application to construct has been filed prior to December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 15 feet or less. For stacks with a larger diameter, four sampling ports, each 90 degrees apart, shall be installed. For emissions units for which a complete application to construct is filed on or after December 1, 1980, at least two sampling ports, 90 degrees apart, shall be installed at each sampling location on all circular stacks that have an outside diameter of 10 feet or less. For stacks with larger diameters, four sampling ports, each 90 degrees apart, shall be installed. On horizontal circular ducts, the ports shall be located so that the probe can enter the stack vertically, horizontally or at a 45 degree angle.
- 5. On rectangular ducts, the cross sectional area shall be divided into the number of equal areas in accordance with EPA Method 1. Sampling ports shall be provided which allow access to each sampling point. The ports shall be located so that the probe can be inserted perpendicular to the gas flow.

(d) Work Platforms.

- 1. Minimum size of the working platform shall be 24 square feet in area. Platforms shall be at least 3 feet wide.
- 2. On circular stacks with 2 sampling ports, the platform shall extend at least 110 degrees around the stack.

3. On circular stacks with more than two sampling ports, the work platform shall

extend 360 degrees around the stack.

4. All platforms shall be equipped with an adequate safety rail (ropes are not acceptable), toeboard, and hinged floor-opening cover if ladder access is used to reach the platform. The safety rail directly in line with the sampling ports shall be removable so that no obstruction exists in an area 14 inches below each sample port and 6 inches on either side of the sampling port.

(e) Access to Work Platform.

APPENDIX SS-1, STACK SAMPLING FACILITIES (version dated 10/07/96) (continued)

- 1. Ladders to the work platform exceeding 15 feet in length shall have safety cages or fall arresters with a minimum of 3 compatible safety belts available for use by sampling personnel.
- 2. Walkways over free-fall areas shall be equipped with safety rails and toeboards. (f) Electrical Power.
- 1. A minimum of two 120-volt AC, 20-amp outlets shall be provided at the sampling platform within 20 feet of each sampling port.
- 2. If extension cords are used to provide the electrical power, they shall be kept on the plant's property and be available immediately upon request by sampling personnel.

 (g) Sampling Equipment Support.
- 1. A three-quarter inch eyebolt and an angle bracket shall be attached directly above each port on vertical stacks and above each row of sampling ports on the sides of horizontal ducts.
- a. The bracket shall be a standard 3 inch x 3 inch x one-quarter inch equal-legs bracket which is 1 and one-half inches wide. A hole that is one-half inch in diameter shall be drilled through the exact center of the horizontal portion of the bracket. The horizontal portion of the bracket shall be located 14 inches above the centerline of the sampling port.
- b. A three-eighth inch bolt which protrudes 2 inches from the stack may be substituted for the required bracket. The bolt shall be located 15 and one-half inches above the centerline of the sampling port.
- c. The three-quarter inch eyebolt shall be capable of supporting a 500 pound working load. For stacks that are less than 12 feet in diameter, the eyebolt shall be located 48 inches above the horizontal portion of the angle bracket. For stacks that are greater than or equal to 12 feet in diameter, the eyebolt shall be located 60 inches above the horizontal portion of the angle bracket. If the eyebolt is more than 120 inches above the platform, a length of chain shall be attached to it to bring the free end of the chain to within safe reach from the platform.
- 2. A complete monorail or dualrail arrangement may be substituted for the eyebolt and bracket.
- 3. When the sample ports are located in the top of a horizontal duct, a frame shall be provided above the port to allow the sample probe to be secured during the test. [Rule 62-297.310(6), F.A.C.]

TABLE 297.310-1 CALIBRATION SCHEDULE (version dated 10/07/96)

[Note: This table is referen	ced in Rule 62-297.310, F.A.C.]			
ITEM	MINIMUM CALIBRATION FREQUENCY	REFERENCE INSTRUMENT	TOLERANCE	
Liquid in glass thermometer	Annually	ASTM Hg in glass ref. thermometer or equivalent, or thermometric points	+/-2%	
Bimetallic thermometer	Quarterly	Calib. liq. in glass thermometer	5 degrees F	
Thermocouple Barometer	Annually Monthly	ASTM Hg in glass ref. thermometer, NBS calibrated reference and potentiometer Hg barometer or	5 degrees F	
		NOAA station	+/-1% scale	
Pitot Tube	When required or when damaged	By construction or measurements in wind tunnel D greater than 16" and standard pitot tube	See EPA Method 2, Fig. 2-2 & 2-3	
Probe Nozzles	Before each test or when nicked, dented, or corroded	Micrometer	+/-0.001" mean of at least three readings Max. deviation between	

Dry Gas Meter

and Orifice

Meter

1. Full Scale: When received, When 5% change observed,

Annually
2. One Point:
Semiannually
3. Check after

each test series

Spirometer or calibrated wet test or dry gas test meter

Comparison check

5%

2%

readings .004"

[electronic file name: 297310-1.doc]

FIGURE 1--SUMMARY REPORT--GASEOUS AND OPACITY EXCESS EMISSION AND MONITORING SYSTEM PERFORMANCE (version dated 7/96)

[Note: This form is referenced in 40 CFR 60.7, Subpart A-General Provisions	1				
Pollutant (Circle One): SO ₂ NO _X TRS H ₂ S	CO Opacity				
Reporting period dates: From	to				
Company:					
Emission Limitation:	·				
Address:	· .				
Monitor Manufacturer:					
Model No.:					
Date of Latest CMS Certification or Audit:	·				
Process Unit(s) Description:	<u> </u>				
Total source operating time in reporting period ¹ :	· · · · · · · · · · · · · · · · · · ·				
Emission data summary 1	CMS performance summary 1				
1. Duration of excess emissions in reporting period due to: a. Startup/shutdown b. Control equipment problems c. Process problems d. Other known causes 2. Total duration of excess emissions 3. Total duration of excess emissions x (100) / [Total source operating time]	1. CMS downtime in reporting period due to: a. Monitor equipment malfunctions b. Non-Monitor equipment malfunctions c. Quality assurance calibration d. Other known causes e. Unknown causes 2. Total CMS Downtime 3. [Total CMS Downtime] x (100) / [Total source]				
For opacity, record all times in minutes. For gases, record for the reporting period: If the total duration of excess ending the total CMS downtime is 5 percent or greater of the total excess emission report described in 40 CFR 60.7(c) shall	missions is 1 percent or greater of the total operating time or al operating time, both the summary report form and the				
Note: On a separate page, describe any changes since last qua	arter in CMS, process or controls.				
I certify that the information contained in this report is true, acc	curate, and complete.				
Name:					
Signature:					
Title:	· · · · · · · · · · · · · · · · · · ·				

[electronic file name: figure1.doc]

40 CFR 60 Subpart A-General Provisions (Version dated 07/23/97)

These conditions are based on the July 1996 CFR version.

[Applicability note: These conditions are for an NSPS emissions unit (a.k.a. "federal facility") that has been built and has conducted the initial performance test(s) in accordance with 40 CFR 60.8.]

{Note: Rule 62-204.800(d), F.A.C., did not adopt/incorporate 40 CFR 60.4, 40 CFR 60.16, and 40 CFR 60.17.}

1. <u>Definitions</u>. For the purposes of Rule 62-204.800(7), F.A.C., the definitions contained in the various provisions of 40 CFR 60, shall apply except that the term "Administrator" when used in 40 CFR 60, shall mean the Secretary or the Secretary's designee. [40 CFR 60.2; Rule 62-204.800(7)(a), F.A.C.]

40 CFR 60.7 Notification and record keeping.

- 2. The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:
- (4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

 [40 CFR 60.7(a)(4)]
- 3. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.

 [40 CFR 60.7(b)]
- 4. Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:
- (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.

- (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

 [40 CFR 60.7(c)(1), (2), (3), and (4)]
- 5. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.
- (1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
- (2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance} (electronic file name: figure 1.doc)

[40 CFR 60.7(d)(1) and (2)]

- 6. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
- (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
- (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
- (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).
- (2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- (3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After

demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)(1)]

7. Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records.

[40 CFR 60.7(f); Rule 62-213.440(1)(b)2.b., F.A.C.]

40 CFR 60.8 Performance tests.

8. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 CFR 60.8(c)]

40 CFR 60.1! Compliance with standards and maintenance requirements.

- 9. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined only by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard. [40 CFR 60.11(a)]
- 10. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). [40 CFR 60.11(b)]
- 11. The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.

 [40 CFR 60.11(c)]
- 12. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

 [40 CFR 60.11(d)]
- 13. The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of EPA Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he or she shall notify the

Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which EPA Method 9 data indicates noncompliance, the EPA Method 9 data will be used to determine opacity compliance.

[40 CFR 60.11(e)(5)]

40 CFR 60.12 Circumvention.

14. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12]

40 CFR 60.13 Monitoring requirements.

- 15. For the purposes of 40 CFR 60.13, all continuous monitoring systems (CMS) required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

 [40 CFR 60.13(a)]
- 16. If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, Appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in Appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.
- (1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 60.8 and as described in 40 CFR 60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 60.8 is conducted.

 [40 CFR 60.13(c)(1)]

- 17. (1) Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.
- (2) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

 [40 CFR 60.13(d)(1) and (2)]
- 18. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:
- (1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
- (2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

 [40 CFR 60.13(e)(1) and (2)]
- 19. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used.

 [40 CFR 60.13(f)]
- 20. When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems (CMS) on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

 [40 CFR 60.13(g)]
- 21. Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally

spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O₂ or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

[40 CFR 60.13(h)]

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Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

PROPOSED Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No.

Brief Description

[-001]

McIntosh Unit 1 - Fossil Fuel Fired Steam Generator

			Allowable Emissions		Equivalent Emiss	sions*			
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	ibs./hour	TPY	lbs:/hour	TPY	Regulatory Citation(s)	See permit condition(s)
VE	All	8,760	20% w/ 40% for 2 min/hr					62-296.405(1)(a),FAC	III.A.5.
VE .	All		60% 3 hrs/24 hrs					62-210.700(3),FAC	III.A.6.
PM	Gas	8,760	0.1 lb/MMBtu			98.5	431.4	62-296.405(1)(b),FAC	III.A.7.
PM	Oil	8,760	0.1 lb/MMBtu			95.0	416,1	62-296.405 1)(b),FAC	III.A.7.
PM	Gas	1,095	0.3 lb/MMBtu			295.5	161.8	62-210.700(3),FAC	III.A.8.
PM	Oil	1,095	0.3 lb/MMBtu			285.0	156.0	62-210.700(3),FAC	III.A.8.
SO ₂	Oil	8,760	2.75 lb/MMBtu			2,612.5	11,442.8	62-296.405(1)(c)1.j.,FAC	III.A.9.
SO ₂	Oil	8,760	2.5% S by weight			2,612.5	11,442.8	AO 53-243945	III.A.10.
Arsenic	Used Oil		5 ppm (42,000 gal/γr)		ľ		8000.0	AO 53-243945	III.A.11.
Cadmium	Used Oil		2 ppm (42,000 gal/yr)				0.0003	AO 53-243945	III.A.11.
Chromium	Used Oil		10 ppm (42,000 gal/yr)				0.0017	AO 53-243945	III.A.11.
Lead	Used Oil		100 ppm (42,000 gal/yr)				0.017	AO 53-243945	III.A.11.
Total Halogens	Used Oil		1,000 ppm [42,000 gal/yr]				0.17	AO 53-243945	III.A.11.
PCBs	Used Oil		<50 ppm (42,000 gal/yr)				0,0084	AO 53-243945	III.A.11.
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Notes:

^{*} The "Equivalent Emissions" listed are for informational purposes only.

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

PROPOSED Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No. Brief Description

|-002| Diesel Engine Peaking Unit 2
|-003| Diesel Engine Peaking Unit 3

			Allowable Emissions	Equivalent Emiss	iions*				
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour	TPY	lbs:/hour	TPY	Regulatory Citation(s)	See permit condition(s)
VE	All	8,760	< 20%					62-296.320(4)(b)1., FAC	III.B.5.
SO ₂	Oil	8,760	0.5% S by weight			15.4	67.5	AO 53-244726	III.B.6.
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* The "Equivalent Emissions" listed are for informational purposes only.

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

PROPOSED Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No. Brief Description

[-004] Gas Turbine Peaking Unit 1

			Allowable Emissions		Equivalent Emiss	sions*			
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour	TPY	lbs:/hour	TPY	Regulatory Citation(s)	See permit condition(s)
VE	All		< 20 %			176.0		62-296.320(4)(b)1., FAC	III.C.5.
502	Oil .		0.5% S by weight			176.0	770.9	AO 53-244727	III.C.6.

Notes:

^{*} The "Equivalent Emissions" listed are for informational purposes only.

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

PROPOSED Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No. Brief Description

[-005] McIntosh Unit 2 - Fossil Fuel Fired Steam Generator

			Allowable Emissions			valent Emiss	enoi •		
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour	ГРҮ	lbs./hour	TPY	Regulatory Citation(s)	See permit condition(s)
PM	Gas	8,760	0.10 lb/MMBtu			118.5	518.8	40 CFR 60.42(a)(1)	III.D.5.
PM	Oil	8,760	0.10 lb/MMBtu			111,5	488.4	40 CFR 60.42(a)(1)	III.D.5.
VE	All	8,760	20% w/ 27% for 6 min/hr					40 CFR 60.42(a)(2)	III.D.5.
SO ₂	Oil	8,760	0.80 lb/MMBtu			892.0	3,907.0	40 CFR 60.43(a)(1)	III.D.6.
NOx	Gas	8 <u>,</u> 760	0.20 lb/MMBtu			236.9	1,037.6	40 CFR 60.44(a)(1)	III.D.8.
NOx	Oil	8,760	0.30 lb/MMBtu			355.4	1,555.4	40 CFR 60.44(a)(2)	III.D.8.
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Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

PROPOSED Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No. Brief Description

[-006] McIntosh Unit 3 - Fossil Fuel Fired Steam Generator

			Allowable Emissions		ſ	Equivalent Emissi	ons*		
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour	TPY	lbs://hour	TPY	Regulatory Citation(s)	See permit condition(s)
PM	Coal	8,760	0.044 lb/MMBtu		İ	160.2	701.5	PSD-FL-008(B)	III.E.5.
PM	Coal/Pet Coke	8,760	0.044 lb/MMBtu			160.2	701.5	PSD-FL-008(B)	III.E.5.
PM	Coal/RDF	8,760	0.050 lb/MMBtu			182.0	701.5	PSD-FL-008(B)	III.E.5.
PM	Coal/Pet Coke/RDF	8,760	0.050 lb/MMBtu		1	182,0	797.2	PSD-FL-008(B)	III.E.5.
PM	Oil	8,760	0.070 lb/MMBtu			254,8	1,116,0	PSD-FL-008(B)	III.E.5.
PM	Oil/RDF	8,760	0.075 lb/MMBtu			273.0	1,195.7	PSD-FL-008(B)	III.E.5.
VE	All	8,760	20% w/ 27% for 6 min/hr					40 CFR 60.42[a][2]	III.E.5.
SO ₂	Oit	8,760	0.80 lb/MMBtu			2,912.0	12,754.6	40 CFR 60.43(a)(1)	III.E.6. & 10
SO ₂	Solid	8,760	1.2 lb/MMBtu			4,368.0	19,131.8	40 CFR 60.43(a)(2)	III.E.6.
_	Gas	8,760	0.20 lb/MMBtu		1	728.0	3,188.6	40 CFR 60.44(a)(1)	III.E.13,
	Liquid	8,760	0.30 lb/MMBtu	1		1,092.0	4,783.0	40 CFR 60.44(a)(2)	III.E.13,
NOx	Solid	1	0.70 lb/MMBtu			2,548.0		40 CFR 60.44(a)(3)	III.E.13.
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Notes:

The "Equivalent Emissions" listed are for informational purposes only.

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

PROPOSED Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No. Brief Description

[-001]

McIntosh Unit 1 - Fossil Fuel Fired Steam Generator

	_		Testing	Frequency	Min. Compliance		
Pollutant Name		Compliance	Time	Base	Test		
or Parameter	Fuel(s)	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
VE	Gas	DEP Method 9	Renewal	1-Jul	60 minutes		III.A.17. & 18. & 28.
VE	Oil	DEP Method 9	Annuat	1-Jul	60 minutes		III.A.17. & 18. & 28.
PM	Gas	EPA Method 17, 5, 5B,or 5F	ASP No. 97-B-01	1-Jul	1 hour		III.A.19. & 29.
PM	Oil	EPA Method 17, 5, 5B,or 5F	Annual	1-Jul	1 hour		III.A.19. & 29.
SO ₂	Oil	EPA Method 6, 6A, 6B,or 6C	Annual	1-Jul	1 hour	ľ	III.A.15. & 20. & 27.
SO ₂	Oil	2.5% S by weight	Each Delivery				III.A.15. & 20. & 21.
Arsenic	Used Oil	ASTM Standard D140-70	Each Delivery		1. A. A.		III.A.11. & 30. & 34.
Cadmium	Used Oil	ASTM Standard D140-70	Each Delivery		·		III.A.11. & 30. & 34.
Chromium	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.11. & 30. & 34.
Lead	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.11. & 30. & 34.
Total Halogens	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.11. & 30. & 34.
Flash Point	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.11. & 30. & 34.
PCBs	Used Oil	ASTM Standard D140-70	Each Delivery				III.A.11. & 30. & 34.
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Notes:

^{*} The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

^{* *} CMS [=] continuous monitoring system

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

PROPOSED Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No.	Brief Description
[-002]	Diesel Engine Peaking Unit 2
[-003]	Diesel Engine Peaking Unit 3

Pollutant Name		Compliance	Testing Time	Frequency Base	Min. Compliance Test		-
or Parameter	Fuel(s)	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
VE	All	EPA Method 9	Annual	9-Jun	30 minutes		III.B.11.
SO₂	Oil	0.5% S by weight	Each Delivery				III.B.6. & 9. & 12.
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Notes:

^{*} The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

^{**}CMS [=] continuous monitoring system

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

PROPOSED Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No.

Brief Description

[-004]

Gas Turbine Peaking Unit 1

	_		Testing	Frequency	Min. Compliance		
Pollutant Name		Compliance	Time	Base	Test		
or Parameter	Fuel(s)	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
VE	Gas	EPA Method 9	Renewal	1-Aug	30 minutes		III.C.11. & 16.
VE	Oil	EPA Method 9	Annual	1-Aug	30 minutes		III.B.11. & 15. & 16.
SO₂	Oil	0.5% S by weight	Each Delivery				III.C.6. & 9. & 12.
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Notes:

^{*} The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

^{**}CMS [=] continuous monitoring system

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

PROPOSED Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No.

Brief Description

[-005]

McIntosh Unit 2 - Fossil Fuel Fired Steam Generator

	_		Testing	Frequency	Min. Compliance		
Pollutant Name		Compliance	Time	Base	Test		
or Parameter	Fuel(s)	Method	Frequency	Date *	Duration	CMS	See permit condition(s)
PM	Gas	EPA Method 17, 5, or 5B	ASP No. 97-B-01	23-Jun	1 hour		III.D.15., 19., & 27.
PM	Oil	EPA Method 17, 5, or 5B	Annual	23-Jun	1 hour		III.D.15., 19., & 27.
VE	Gas	EPA Method 9	Renewal	23-Jun	60 minutes	Yes	III.D.15. & 26.
VE	Oil	EPA Method 9	Annual	23-Jun	60 minutes	Yes	III.D.15. & 26.
SO ₂	Oil	EPA Method 6, 6A, or 6C	Annual	23-Jun	1 hour	Yes	III.D.16., 17., 19., & 29.
NOx	All	EPA Method 7, 7A, 7C, 7D, or 7E	Annuai	23-Jun	1 hour		III.D.15. & 19.
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Notes

^{*} The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

^{* *}CMS (=) continuous monitoring system

Lakeland Electric & Water Utilities C. D. McIntosh, Jr. Power Plant

PROPOSED Permit No.: 1050004-003-AV

Facility ID No.: 1050004

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

E.U. ID No.

Brief Description

[-006]

McIntosh Unit 3 - Fossil Fuel Fired Steam Generator

			Testing	Frequency	Min. Compliance		
Pollutant Name		Compliance	Time	Base	Test		
or Parameter	Fuel(s)	Method	Frequency	Date *	Duration	CMS**	See permit condition(s)
PM	Gas Only	EPA Method 17, 5, or 5B	ASP No. 97-B-01	23-Jun	1 hour		III.E.21., 23., & 31.
РМ	All Other	EPA Method 17, 5, or 5B	Annual	23-Jun	1 hour		III.E.21., 23., & 31.
VE	Gas Only	EPA Method 9	Renewal	23-Jun	60 minutes	Yes	III.D.21. & 30.
VE	All Other	EPA Method 9	Annual	23-Jun	60 minutes	Yes	III.D.21, & 30.
so₂	Liquid & Solid	EPA Method 6, 6A, or 6C	Annuat	23-Jun	1 hour	Yes	III.E.21. & 23.
NO _x	AII	EPA Method 7, 7A, 7C, 7D, or 7E	Annual	23-Jun	1 hour	Yes	III.E.21. & 23.
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Notes:

^{*} The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C.

^{**}CMS [=] continuous monitoring system

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 (version dated 02/05/97) (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

Appendix H-1, Permit History/ID Number Changes

City of Lakeland C. D. McIntosh

PROPOSED Permit No.: 1050004-003-AV

Facility ID No.: 1050004

Permit History (for tracking purposes):

E.U. <u>ID No</u>	Description	Permit No.	Issue Date	Expiration Date	Extended Date ^{1,2,3}	Revised Date(s)
-001	Boiler Unit #1	AO53-243945	03/23/95	05/27/99		
-002	Peaking Unit 2 (Diesel Engine)	AO53-244726	06/01/94	05/27/99		
-003	Peaking Unit 3 (Diesel Engine)	AO53-244726	06/01/94	05/27/99		
-004	Gas Turbine Peaking Unit 1	AO53-244727	06/01/94	05/27/99		
-005	Unit 2 Electric Generator	AO53-174090	04/17/90	04/13/95	08/14/96	
-006	McIntosh Unit 3 Coal/MSW Fired	PSD-FL-008	12/27/78			
		PSD-FL-008A				
		PSD-FL-008B	12/11/95			
		PA74-06SR	12/07/78			

(if applicable) ID Number Changes (for tracking purposes):

From: Facility ID No.: 40TPA530004

To: Facility ID No.: 1050004

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.
- 3 ORDER EXTENDING PERMIT EXPIRATION DATE dated 02/09/98.

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

Phase II Permit Application

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: New

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

C.D. McIntosh, Jr., 676

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 reunits, enter the requested information in columns d and e

Compliance Plan b С Boiler ID# Unit Will New Units New Units Repowering Plan Hold Allowances in Accordance with 40 CFR **7**2.9(c)(1) Monitor Certification Commence Operation Date Deadline

1	Yes	No		
2	Yes	No		
3	Yes	No		
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes			
	Yes		·	
	Yes	·		
	Yes			

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. \Box

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

Plant Name (from Step 1) C.D. McIntosh, Jr.

STEP 4 Read the standard requirements and certification, enter the name of the designated repre-sentative, and sign and date

Standard Requirements

Permit Requirements.

- The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:

 (i) Submit a complete Acid Rain part application (including a compliance plan) under 40 CFR part 72, 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 permit;

 The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall:

 (i) Contrate the unit is compliance with a complete Acid Rain part application or a suppression Acid Rain
- (i) Operate the unit in compliance with a complete Acid Rain part application or a superseding Acid Rain 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 Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75, and Rule 62-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.

 (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to
- monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall: (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)) not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
- ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide

 - (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- 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

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the 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,

Plant Name (from Step 1) C.D. McIntosh, Jr.

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

Certification

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

Name Timothy C. Bates, Plant Manager	
Signature Simily C Batis.	Date 12/14/95

Phase II Permit-Page 4

STEP 5 (optional) Enter the source AIRS and FINDS identification numbers, if known

AIRS	
FINDS	

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

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:)	·.
Florida Electric Power Coordinating Group, Inc.) ,)	ASP No. 97-B-01
Petitioner.)	

ORDER ON REQUEST FOR ALTERNATE PROCEDURES AND REQUIREMENTS

Pursuant to Rule 62-297.620, Florida Administrative Code (F.A.C.), the Florida Electric Coordinating Group, Incorporated, (FCG) petitioned for approval to: (1) Exempt fossil fuel steam generators which burn liquid and/or solid fuel for less than 400 hours during the federal fiscal year from the requirement to conduct an annual particulate matter compliance test; and, (2) Exempt fossil fuel steam generators which burn liquid and/or solid fuel for less than 400 hours during the federal fiscal year from the requirement to conduct an annual particulate matter compliance test during the year prior to renewal of an operation permit. This Order is intended to clarify particulate testing requirements for those fossil fuel steam generators which primarily burn gaseous fuels including, but not necessarily limited to natural gas.

Having considered the provisions of Rule 62-296.405(1), F.A.C., Rule 62-297.310(7), F.A.C., and all supporting documentation, the following Findings of Fact, Conclusions of Law, and Order are entered:

FINDINGS OF FACT

- 1. The Florida Electric Power Coordinating Group, Incorporated, petitioned the Department to exempt those fossil fuel steam generators which have a heat input of more than 250 million Btu per hour and burn solid and/or liquid fuel less than 400 hours during the year from the requirement to conduct an annual particulate matter compliance test. [Exhibit 1]
- 2. Rule 62-296.405(1)(a), F.A.C., applies to those fossil fuel steam generators that are not subject to the federal standards of performance for new stationary sources (NSPS) in 40 CFR 60 and which have a heat input of more than 250 million Btu per hour.
- 3. Rule 62-296.405(1)(a), F.A.C., limits visible emissions from affected fossil fuel steam generators to, "20 percent opacity except for either one six-minute period per hour during which

not exceed 40 percent. The option selected shall be specified in the emissions unit's construction and operation permits. Emissions units governed by this visible emission limit shall test for particulate emission compliance annually and as otherwise required by Rule 62-297, F.A.C."

- 4. Rule 62-296.405(1)(a), F.A.C., further states, "Emissions units electing to test for particulate matter emission compliance quarterly shall be allowed visible emissions of 40 percent opacity. The results of such tests shall be submitted to the Department. Upon demonstration that the particulate standard has been regularly complied with, the Secretary, upon petition by the applicant, shall reduce the frequency of particulate testing to no less than once annually.
- 5. Rule 297.310(7)(a)1., F.A.C., states, "The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit."
- 6. Rule 297.310(7)(a)3., F.A.C., states, "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.
- 7. Rule 297.310(7)(a)3., F.A.C., further states, "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 and/or solid fuel for a total of no more than 400 hours."
- 8. Rule 297.310(7)(a)4., F.A.C., states, "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 ϵ emental lead; 30 tons per year or more of any other regulated air pollutant..."
- 9. Rule 297.310(7)(a)5., F.A.C., states, "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."
- 10. Rule 297.310(7)(a)6., F.A.C., states, "For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule a compliance test shall not be

required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup."

- 11. Rule 297.310(7)(a)7., F.A.C., states, "For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup." [Note: The reference should be to Rule 62-296.405(1)(a), F.A.C., rather than Rule 62-296.405(2)(a), F.A.C.]
- 12. The fifth edition of the U. S. Environmental Protection Agency's <u>Compilation of Air Pollutant Emission Factors</u>, AP-42, that emissions of filterable particulate from gas-fired fossil fuel steam generators with a heat input of more than about 10 million Btu per hour may be expected to range from 0.001 to 0.006 pound per million Btu. [Exhibit 2]
- 13. Rule 62-296.405(1)(b), F.A.C. and the federal standards of performance for new stationary sources in 40 CFR 60.42, Subpart D, limit particulate emissions from uncontrolled fossil fuel fired steam generators with a heat input of more than 250 million Btu to 0.1 pound per million Btu.

CONCLUSIONS OF LAW

- 1. The Department has jurisdiction to consider the matter pursuant to Section 403.061, Florida Statutes (F.S.), and Rule 62-297.620, F.A.C.
- 2. Pursuant to Rule 62-297.310(7), F.A.C., the Department may require Petitioner to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.
- 3. There is reason to believe that a fossil fuel steam generator which does not burn liquid and/or solid fuel (other than during startup) for a total of more than 400 hours in a federal fiscal year and complies with all other applicable limits and permit conditions is in compliance with the applicable particulate mass emission limiting standard.

ORDER

Having considered the requirements of Rule 62-296.405, F.A.C., Rule 62-297.310, F.A.C., and supporting documentation, it is hereby ordered that:

1. 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;

- 2. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup;
- 3. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(1)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup;
- 4. 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 particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.
- 5. Pursuant to Rule 62-297.310(7), F.A.C., owners of affected fossil fuel steam generators may be required to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.
- 6. Pursuant to Rule 62-297.310(8), F.A.C., owners of affected fossil fuel steam generators shall submit the compliance test report to the District Director of the Department district office having jurisdiction over the emissions unit and, where applicable, the Air Program Administrator of the appropriate Department-approved local air program within 45 days of completion of the test.

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, or a party requests mediation as an alternative remedy under section 120.573 before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

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 (or a request for mediation, as discussed below) 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 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 each petitioner, if any;
- (e) A statement of 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 each petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by each petitioner, stating precisely the action each petitioner wants the Department to take with respect to the Department's action or proposed action in the 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.

A person whose substantial interests are affected by the Department's proposed decision, may elect to pursue mediation by asking all parties to the proceeding to agree to such mediation and by filing with the Department a request for mediation and the written agreement of all such parties to mediate the dispute. The request and agreement must be filed in (received by) the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

A request for mediation must contain the following information:

Best Available Copy

- (a) The name, address, and telephone number of the person requesting mediation and that person's representative, if any;
 - (b) A statement of the preliminary agency action;
 - (c) A statement of the relief sought; and
- (d) Either an explanation of how the requester's substantial interests will be affected by the action or proposed action accressed in this notice of intent or a statement clearly identifying the petition for hearing that the requester has already filed, and incorporating it by reference.

The agreement to mediate must include the following:

- (a) The names, addresses, and telephone numbers of any persons who may attend the mediation;
- (b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time;
 - (c) The agreed allocation of the costs and fees associated with the mediation;
- (d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation;
- (e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen;
- (f) The name of each party's representative who shall have authority to settle or recommend settlement; and
 - (g) The signatures of all parties or their authorized representatives.

As provided in section 120.573 of the Florida Statutes, the timely agreement of all parties to mediate will toll the time limitations imposed by sections 120.565 and 120.57 for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such a modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under sections 120.569 and 120.57 remain available for disposition of the dispute, and the notice will

specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

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

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 the 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. Upon timely filing of a petition, this Order will not be effective until further Order of the Department.

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, Mail Station 35, Tallahassee, Florida 32399-3000; and, by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Notice of Agency Action is filed with the Clerk of the Department.

DONE AND ORDERED this 17 day of March, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

HOWARD L. RHODES, Director

Division of Air Resources Management

Twin Towers Office Building

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

(904) 488-0114

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that a copy of the foregoing was mailed to Rich Piper, Chair, Florida Power Coordinating Group, Inc., 405 Reo Street, Suite 100, Tampa, Florida 33609-1004, on this Little day of March 1997.

Clerk Stamp

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

Cléřk

Date

* FLORIDA ELECTRIC POWER COORDINATING GROUP, INC. (FCG)
405 REO STREET, SUITE 100 * (813) 289-5644 * FAX (813) 289-5646
TAMPA, FLORIDA 33609-1004

January 28, 1997



Clair H. Fancy, P.E. Chief, Bureau of Air Regulation Florida Department of Environmental Protection 2600 Blair Stone Road, MS 5505 Tallahassee, FL 32301

RECEIVED

JAN 28 1997

BUREAU OF
AIR REGULATION

RE: Comments Regarding Draft Title V Permits

Dear Mr. Fancy:

The Floridz Electric Power Coordinating Group, Inc. (FCG), which is made up of 36 utilities owned by investors, municipalities, and cooperatives, has been following the implementation of Title V in Florida and recently submitted comments to you on draft Title V permit conditions by letter dated December 4, 1996. As indicated in that letter, representatives from the FCG would like to meet with you and other members of your air permitting staff to discuss some significant concerns that FCG member companies have regarding conditions that may be included in Title V permits issued by your office. While we will be discussing these issues with you and your staff in greater detail at that meeting, we would like to explain some of our concerns in this letter.

Primarily, the FCG members are concerned that the Title V permits may contain conditions that are much different in important respects than those conditions currently included in existing air permits. During the rulemaking workshops and seminars conducted by the Department to discuss the rules implementing the Title V permitting program, representations were made on several occasions that industry could expect to see permit conditions that were substantively similar to existing permit conditions and that primarily the format was changing. Representations were also made to industry that Title V did not impose additional substantive requirements beyond what was already required under the Department's rules. Based on the first draft Title V permit that we have reviewed, we are concerned that there may be some attempt to change the substantive requirements on existing facilities through the Title V permitting process, and we would like to discuss this with you at the meeting we have scheduled for January 30, 1997.

1. Federal Enforceability--The FCG has long been concerned about the designation of non-federally enforceable permit terms and conditions. We are concerned about this issue because the Department's first draft Title V permits have included language stating that all terms and conditions would become federally enforceable once the permit is issued. This approach is consistent with the Department's guidance memorandum dated September 13, 1996 (DARM-PER/V-18), but we understand that the Department may now intend to remove all references to

Clair H. Fancy, P.E. Chief, Bureau of Air Regulation Florida Department of Environmental Protection January 28, 1997 Page 2

the federal enforceability of permit terms and conditions. We are also concerned about this approach because a Title V permit is generally federally enforceable and, without any designation of non-federally enforceable terms and conditions, the entire permit could be interpreted to be federally enforceable. As we stated in the December 4 letter as well as our letter dated October 11, 1996, all terms and conditions in a Title V permit do not become enforceable by the U.S. Environmental Protection Agency and citizens under the Clean Air Act simply by inclusion in a Title V permit. To make it clear which provisions in a Title V permit are not federally enforceable (which are being included because of state or local requirements only), it is very important to specifically designate those conditions as having no federally enforceable basis. Such a designation is actually required under the federal Title V rules, which provide that permitting agencies are to "specifically designate as not being federally enforceable under the Act any terms and conditions included in the permit that are not required under the Act or under any of its applicable requirements." 40 CFR § 70.6(b). We would like to discuss with you our concerns about this issue and to again specifically request that when Title V permits are issued by the Department, conditions having no federally enforceable basis clearly be identified as such.

- 2. PM Testing on Gas--The FCG understands that the Department may attempt to require annual particulate matter compliance testing while firing natural gas to determine compliance with the 0.1 lb/mmBtu emission limit established under Rule 62-296.405(1)(b), F.A.C. The FCG member companies feel strongly that compliance testing for particulate matter should not be required while firing natural gas. The Department has not historically required particulate matter compliance testing while firing natural gas, it is not required under the current permits for these units, and it should not be necessary since natural gas is such a clean fuel. Typically only de minimis amounts of particulate matter would be expected from the firing of natural gas, so compliance testing would not provide meaningful information to the Department, and the expense to conduct such tests is not justified. We understand that Department representatives suggested that industry could pursue an alternative test procedure under Rule 62-297.620, F.A.C., to allow a visible emissions test to be used in lieu of a stack test for determining compliance with the particulate matter limit. While certainly a visible emissions test would be preferable over a stack test, neither of these tests should be needed to demonstrate compliance with the particulate matter limit of 0.1 lb/mmBtu while burning natural gas. The FCG strongly urges that the Department reconsider its position on this issue and clarify that compliance testing for particulate matter while firing natural gas is not required.
- 3. Excess Emissions--By letter dated December 5, 1996, the U.S. Environmental Protection Agency (EPA) submitted a letter commenting on a draft Title V permit that had been issued by the Department and indicated some concern regarding excess emission provisions included in conditions that were quoted from Rule 62-210.700, F.A.C. Because the permit conditions cited simply quote the applicable provisions of the Department's rules regarding

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Clair H. Fancy, P.E.
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
January 28, 1997
Page 3

excess emissions and because these rules have been approved as part of Florida's State Implementation Plan, the permit conditions are appropriate to be included in the permit. We understand that the Department intends to include as applicable requirements in Title V permit conditions the provisions of Rule 62-210.700, F.A.C. If the Department receives any further adverse comments regarding the excess emissions rule under 62-210.700, F.A.C., we would appreciate your contacting us. Because this issue is so important to us, we would like to discuss it with you in greater detail at our meeting on January 30.

- Compliance Testing for Combustion Turbines--While the Department's November 22, 1995, guidance regarding the compliance testing requirements for combustion turbines clearly states that the use of heat input curves based on ambient temperatures and humidities is to be included as a permit condition only if requested by a permittee, we understand that the Department may intend to include this requirement in Title V permits for all combustion turbines. As we are sure you recall, the FCG worked over a period of several months with the Department on the development of the guidance memorandum and it was clearly understood by FCG members that the heat input curves would not be mandated but would remain voluntary for any existing combustion turbine. It was also understood by FCG members that the requirement to conduct testing at 95 to 100 percent of capacity would be required only if the permit applicant requested the use of heat input curves. We understand that the Department may be interpreting the requirement to use heat input curves and to test at 95 to 100 percent of permitted capacity to be mandatory for all combustion turbines. We would like to clarify this with you during our meeting. Also, we would like to confirm that, regardless of whether a combustion turbine uses heat input curves or tests at 95 to 100 percent of permitted capacity, it is necessary to test at four load points and correct to ISO only to determine compliance with the nitrogen oxides (NOx) standard under New Source Performance Francard Subpart GG under 40 CFR § 60.332 and not annually thereafter.
- Test Methods--The FCG is concerned about the possibility of the Department requiring a full permit revision to authorize the use of an approved test method not specifically identified in a Title V permit, even though the Department may have separately approved the use of the particular test method for a unit (i.e., through a compliance test protocol). It is the FCG's position that language should be included in all Title V permits indicating that other test methods approved by the Department may be used. Further, a full permit revision (including public notice) should not be necessary when a test method not previously identified in the permit is approved for use by a unit. The Department's subsequent approval of test methods should simply be included in the next permit renewal cycle. The FCG understands that the Department planned to confirm this approach with the U.S. Environmental Protection Agency Region IV, and we would like to discuss this issue with you at the January 30 meeting to learn of the agency's response.

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Clair H. Fancy, P.E.
Chief, Bureau of Air Regulation
Florida Department of Environmental Protection
January 28, 1997
Page 4

- Quarterly Reports--The FCG understands that the Department may be interpreting the quarterly reporting requirements under Rule 62-296.405(1)(g), F.A.C., to apply regardless of whether continuous emissions monitors were required under the preceding Rule. 62-296.405(1)(f), F.A.C. It is the FCG's position that quarterly reports are required under Rule 62-296.405(1)(g) only when continuous emissions monitors are required under the preceding paragraph (f). While this may not be entirely clear from the language of the rules, paragraphs (f) and (g) were originally included in a separate rule on "continuous emission monitoring requirements" where it was very clear that the requirements of paragraph (g) applied only if continuous emission monitoring was required under paragraph (f). Research indicates that Rule 17-2.710, F.A.C. (copy attached), where these provisions were originally located, was first transferred to Rule 17-297.500, F.A.C. (which later became Rule 62-297.500), later repealed in November of 1994, and ultimately replaced with what is now Rule 62-296.405(1)(f) and (g), F.A.C. To the extent that an emissions unit is not subject to Rule 62-296.405(1)(f) and is not required to install and operate continuous emissions monitors (e.g., oil- and gas-fired units), the quarterly reporting requirements of paragraph (g) should not apply.
- Trivial Activities--As you may recall, in May of 1996, the FCG submitted to the Department a list of small, de minimis emissions units and activities that it considered to be "trivial," consistent with the list developed by EPA as part of the Title V "White Paper" and incorporated by reference by the Department in its March 15, 1996, guidance memorandum (DARM-PER/V-15-Revised). We never received a response from the Department and now understand that the Department may not have made a determination as to whether any of the emission units or activities on the list should qualify as "trivial." This is an important issue to the FCG because only "trivial" activities can be omitted from the Title V permit application and permit, and ultimately omitted from emission estimates in the annual air operation reports under Rule 62-210.370(3), F.A.C. The FCG remains hopeful that the Department will consider its request to determine that most, if not all, of the emission units and activities on the May, 1996, list to be "trivial." We would like to discuss a possible resolution of this issue with you and your staff at the January 30 meeting.
- 8. Permit Shield--The FCG continues to be concerned about the language in Conditions 5 and 20 of Appendix TV-1, Title V Conditions, which circumvents the permit shield provisions under Section 403.0872(15), Florida Statutes, and Rule 62-213.460, F.A.C. The FCG believes that these conditions should be deleted in their entirety. To the extent that the Department attempt to cavea: the applicability of those conditions, the FCG believes that it is important to cite to not only the regulatory citation for the permit shield but the statutory citation as well.

Thank you again for considering the FCG's comments on the draft Title V permits. We very much appreciate the cooperation we have received from the Department throughout the

Clair H. Fancy, P.E. Chief, Burcau of Air Regulation Florida Department of Environmental Protection January 28, 1997 Page 5

Title V implementation process, and we look forward to our meeting later this week. If you have any questions in the meantime, please call me at 561-625-7661.

Sincerely,

Rich Piper, Chair

FCG Air Subcommittee

Rich Paper

Enclosures

cc: Howard L. Rhodes, DEP
John Brown, DEP
Pat Comer, DEP OGC
Scott M. Sheplak, DEP
Edward Svec, DEP
FCG Air Subcommittee
Angela Morrison, HGSS

10382

COMPILATION OF AIR POLLUTANT EMISSION FACTORS

VOLUME I: STATIONARY POINT AND AREA SOURCES

Office Of Air Quality Planning And Standards
Office Of Air And Radiation
U. S. Environmental Protection Agency
Research Triangle Park, NC 27711

January 1995

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1.4 Natural Gas Combustion

1.4.1 General 1-2

Natural gas is one of the major fuels used throughout the country. It is used mainly for industrial process steam and heat production; for residential and commercial space heating; and for electric power generation. Natural gas consists of a high percentage of methane (generally above 80 percent) and varying amounts of ethane, propane, butane, and inerts (typically nitrogen, carbon dioxide, and helium). Gas processing plants are required for the recovery of liquefiable constituents and removal of hydrogen sulfide before the gas is used (see Section 5.3, Natural Gas Processing). The average gross heating value of natural gas is approximately 8900 kilocalories per standard cubic meter (1000 British thermal units per standard cubic foot), usually varying from 8000 to 9800 kcal/sem (900 to 1100 Btt/sef).

1.4.2 Emissions And Controls³⁻⁵

Even though natural gas is considered to be a relatively clean-burning fuel, some emissions can result from combustion. For example, improper operating conditions, including poor air/fuel mixing, insufficient air, etc., may cause large amounts of smoke, carbon monoxide (CO), and organic compound emissions. Moreover, because a sulfur-containing mercaptan is added to natural gus to permit leak detection, small amounts of sulfur oxides will be produced in the combustion process.

Nitrogen oxides (NO_x) are the inajor pollutants of concern when burning natural gas. Nitrogen oxides emissions depend primarily on the peak temperature within the combustion chambet as well as the furnace-zone oxygen concentration, nitrogen concentration, and time of exposure at peak temperatures. Emission levels vary considerably with the type and size of combustor and with operating conditions (particularly combustion air temperature, load, and excess air level in boilers).

Currently, the two most prevalent NO_x control techniques being applied to natural gas-fired boilers (which result in characteristic changes in emission rates) are low NO_x burners and flue gas recirculation. Low NO_x burners reduce NO_x by accomplishing the combustion process in sugar. Staging partially delays the combustion process, resulting in a profer trame which suppresses 1.0_x formation. The three most common types of low NO_x burners being applied to nature gas-fired boilers are staged air burners, staged fuel burners, and radiant fiber burners. Nitrept oxide emission reductions of 40 to 85 percent (relative to uncontrolled emission levels) have been observed with low NO_x burners. Other combustion staging techniques which have been applied to natural gas-fired boilers include low excess air, reduced air preheat, and staged combustion (e.g., burners-out-of-service and overfire air). The degree of staging is a key operating parameter influencing NO_x emission rates for these systems.

In a fine gas recroulation (FGR) system, a portion of the fine gas is recycled from the stack to the burner windbox. Upon entering the windbox, the gas is mixed with combustion air prior to being fed to the burner. The FGR system reduces NO_x emissions by two mechanisms. The recycled fine gas is made up of combustion products which act as inerts during combustion of the fuelzair mixture. This additional mass is heated in the combustion zone, thereby lowering the peak frame temperature and reducing the amount of NO_x formed. To a lesser extent, FGR also reduce. NO_y formation by lowering the oxygen concentration in the primary flame zone. The amount of flue gas recirculated is a key operating parameter influencing NO_x emission rules for these systems. Flue gas

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recirculation is normally used in combination with low NO_x burners. When used in combination, these techniques are capable of reducing uncontrolled NO_x emissions by 60 to 90 percent.

Two post-combustion technologies that may be applied to natural gas-fired boilers to reduce NO_x emissions by further amounts are selective noncatalytic reduction and selective catalytic reduction. These systems inject ammonia (or urea) into combustion flue gases to reduce inlet NO_x emission rates by 40 to 70 percent.

Although not measured, all particulate matter (PM) from natural gas combustion has been estimated to be less than I micrometer in size. Particulate matter is composed of filterable and condensable fractions, based on the EPA sampling method. Filterable and condensable emission rates are of the same order of magnitude for boilers; for residential furnaces, most of the PM is in the form of condensable material.

The rates of CO and trace organic emissions from boilers and furnaces depend on the efficiency of natural gas combustion. These emissions are minimized by combustion practices that promote high combustion temperatures, long residence times at those temperatures, and turbulent mixing of fuel and combustion air. In some cases, the addition of NO_x control systems such as FGR and low NO_x burners reduces combustion efficiency (due to lower combustion temperatures), resulting in higher CO and organic emissions relative to uncontrolled boilers.

Emission factors for natural gas combustion in boilers and furnaces are presented in Tables 1.4-1, 1.4-2, and 1.4-3.6 For the purposes of developing emission factors, natural gas combustors have been organized into four general categories: utility/large industrial boilers, small industrial boilers, commercial boilers, and residential furnaces. Boilers and furnaces within these categories share the same general design and operating characteristics and hence have similar emission characteristics when combusting natural gas. The primary factor used to demarcate the individual combustor categories is heat input.

Table 1.4-1 (Metric And English Units)... EMISSION FACTORS FOR PARTICULATE MATTER (PM)
FROM NATURAL GAS COMBUSTION*

Combustor Type	: :	Filterable PM ^e			Condensable PM ^d		
(Size, 10° Btu/hr Heat Input) (SCC)		kg/10 ⁶ m ³	Ĭb/10 ⁶ ſt ³	RATING	kg/10 ⁶ m ³	1P\10 ₆ U ₃	RATING
Utility/large industrial boilers (> 100) (1-01-006-01, 1-01-006-04)	·	16 - 80	1 - 5	В	ND	ND	NA
Small industrial boilers (10 - 100) (1-02-006-02)	•	99	6.2	В	120	7.5	D
Commercial boilers (0.3 - < 10) (1-03-006-03)		72	4.5	C	120	7.5	С
Residential furnaces (<0.3) (No SCC)	: :	2.8	0.18	. C	180	. 11	D

References 9-14. All factors represent uncontrolled emissions. Units are kg of pollutant/10⁶ cubic meters natural gas fired and lb of pollutant/10⁶ cubic feet natural gas fired. Based on an average natural gas higher heating value of 8270 kcal/m³ (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. ND = no data. NA = not applicable.

b SCC = Source Classification Code.

[°] Filterable PM is that particulate matter collected on or prior to the filter of an EPA Method 5 (or equivalent) sampling train.

d Condensable PM is that particulate matter collected using EPA Method 202, (or equivalent). Total PM is the sum of the filterable PM and condensable PM. All PM emissions can be assumed to be less than 10 micrometers in aerodynamic equivalent diameter (PM-10).

. Table 1.4-2 (Metric And English Units). EMISSION FACTORS FOR SULFUR DIOXIDE (SO2), NITROGEN OXIDES (NO2), AND CARBON MONOXIDE (CO) FROM NATURAL GAS COMBUSTION*

,					1			e e e de la composition de la composition	
Combustor Type (Size, 10 ⁶ Btu/lir Heat Input)		SO ₂ c		. · · · · · · · · · · · · · · · · · · ·	NO ^x d	à		· r COe	
(SCC) ^b	kg/10 ⁶ m ³	1P\10g V3	RATINO	$kg/10^6 m^3$	19/10g U3	RATING	$kg/10^6 m^3$	1P/106 U3	RATINO
Utility/large Industrial Boilers (> 100) (1-01-006-01, 1-01-006-04)		,		=	1.1				
Uncontrolled	9.6	0.6	٨	8800 1	550 ^f	٨	640	40	٨
Controlled - Low NOx burners	9.6	0.6	λ	:1300	81 ^f	D	ИD	ИD	NA
Controlled - Flue gas recirculation	9.6	0.6	A.	850	53 ^f	D	סא	, ND	ИМ
Small Industrial Doilers (10 - 100) (1-02-006-02)			1		•		· .	:	
Uncontrolled	9.6	0.6	٨	2240	140	Λ .	560	35	A
Controlled - Low NO _x	9.6	0.6	. A	1300	. 816	D	980	61	D
Controlled - Flue gas recirculation	9.6	0.6	Å	480	→ 30	·C	590	37	С
Commercial Boilers (0.3 - <10) (1-03-006-03)			• • •						
Uncontrolled	9.6	0.6	٠ ٨ .	1600	100	В	330	21	С
Controlled - Low NOx burners	9.6	0.6		270	17	C	425	. 27	С
Controlled - Flue gas recirculation	9.6	0.6	. Λ	580	36	D	, ND 1.	ND	ΝΛ
Residential Furnaces (<0.3) (No SCC)							٠. نــــــــــــــــــــــــــــــــــــ		
Uncontrolled	9.6	0.6	. λ	. 1500	94	B	640	10	В

^a Units are kg of pollutant/10⁶ cubic meters natural gas fired and 1b of pollutant/10⁶ cubic feet natural gas fired. Based on an average natural gas fired higher heating value of 8270 kcal/m³ (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given emission factor by the ratio of the specified heating value to this average heating value. ND = no data. NA = not applicable.

b SCC = Source Classification Code.

c Reference 7. Based on average sulfur content of natural gas, 4600 g/10⁶ Nm³ (2000 gr/10⁶ scf).

d References 10,15-19. Expressed as NO₂. For tangentially fired units, use 4400 kg/10⁶ m³ (275 lb/10⁶ ft³). At reduced loads, multiply factor by load reduction coefficient in Figure 1.4-1. Note that NO_x emissions from controlled boilers will be reduced at low load conditions.

c References 9-10,16-18,20-21.

f Emission factors apply to packaged boilers only.

Table 1.4-3 (Metric And English Units). EMISSION FACTORS FOR CARBON DIOXIDE (CO2) AND TOTAL ORGANIC COMPOUNDS (TOC) FROM NATURAL GAS COMBUSTIONA

Combustor Type	. CO ₂ c			TOCd			
(Size, 10 ⁶ Btu/hr Heat Input) (SCC) ^h	kg/10 ⁶ m ³	16/10 ⁶ ft ³	RATING	kg/10 ⁶ m ³	1b/10 ⁶ ቢ ³	RATING	
Utility/large industrial boilers (> 100) (1-01-006-01, 1-01-006-04)	ND¢	ND	. ΝΛ	28 ^f	1.7 ^f	C,	
Small industrial boilers (10 - 100) (1-02-006-02)	1.9 E+06	1.2 E+05	D 	92 ^g	, 5.8g	С	
Commercial boilers (0.3 - < 10) (1-03-006-03)	1.9 E+06	1.2 E+05	С	128 ^h	8.0 ^h	С	
Residential furnaces (No SCC)	2.0 E+06	1.3 E+05	D	180 ^h	11 ^h	. D	

^a All factors represent uncontrolled emissions. Units are kg of pollutant/10⁶ cubic meters and lb of pollutant/10⁶ cubic feet. Based on an average natural gas higher heating value of 8270 kcal/m³ (1000 Btu/scf). The emission factors in this table may be converted to other natural gas heating values by multiplying the given factor by the ratio of the specified heating value to this average heating value. NA = not applicable.

b SCC = Source Classification Code.
c References 10,22-23.

d References 9-10,18.

c ND = no data.

Reference 8: methane comprises 17% of organic compounds.

Reference 8: methane comprises 52% of organic compounds.

h Reference 8: metitane comprises 34% of organic compounds.

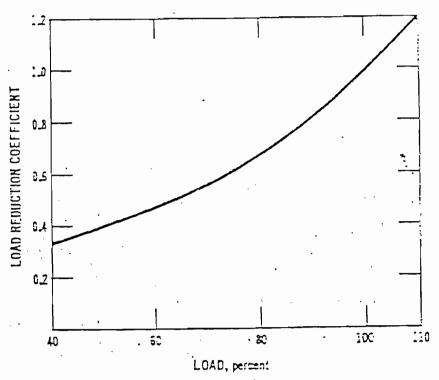


Figure 1.4-1. Load reduction coefficient as a function of boiler load. (Used to determine NO, reductions at reduced loads in large boilers.)

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- 2. Chemical Engineers' Handbook, Fourth Edition, J. H. Perry, Editor, McGraw-Hill Book Company, New York, NY, 1963.
- 3. Background Information Document For Industrial Boilers, EPA-450/3-82-006a, U. S. Environmental Protection Agency, Research Triangle Park, NC, March 1982.

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- 5. Fine Particulate Emissions From Stationary and Miscellaneous Sources in the Louth Coast Air Basin, California Air Resources Board Contract No. A6-191-30, KVB, Inc., Tustin, CA, February 1979.
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- 7. Systematic Field Study of NO, Emission Control Methods For Utility Boilers, APTD-1163, U.S. Environmental Protection Agency, Research Triangle Park, NC, December 1971.

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- 9. J. L. Muhlbaier, "Particulate and Gaseous Emissions From Natural Gas Furnaces and Water Heaters", Journal of the Air Pollution Control Association, December 1981.
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- 12. C. C. Shih, et al., Emissions Assessment of Conventional Stationary Combustion Systems, Volume III: External Combustion Sources for Electricity Generation, EPA Contract No. 68-02-2197, TRW, Inc., Redondo Beach, CA, November 1980.
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- 14. N. F. Suprenant, et al., Emissions Assessment of Conventional Stationary Combustion Systems, Volume V: Industrial Combustion Sources, EPA Contract No. 68-02-2197, GCA Corporation, Bedford, MA, October 1980.
- 15. Emission: Test on 200 HP Boiler at Kaiser Hospital in Woodland Hills, Energy Systems Associates, Tustin, CA, June 1986.
- 16. Results From Performance Tests: California Milk Producers Boiler No. 5, Energy Systems Associates, Tustin, CA, November 1984.
- 17. Source Test For Measurement of Nitrogen Oxides and Carbon Monoxide Emissions From Boiler Exhaus: at GAF Building Materials, Pacific Environmental Services, Inc., Ealdwin Park, CA, May 1991.
- J. P. Kesselring and W. V. Krill. "A Low-NO, Burner For Gas-Fired Firetube Boilers", Proceedings: 1985 Symposium on Stationary Combustion NO, Control. Volume 2, EPRI CS-4360, Electric Power Research Institute, Palo Alto, CA, January 1986.
- NO_x Emission Control Technology Update, EPA Contract No. 68-01-6558, Radian Corporation, Research Triangle Park, NC, January 1984.
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- 21. Evaluation of the Pollutant Emissions From Gas-Fired Forced Air Furnaces: Research Report No. 1503, American Gas Association Laboratories, Cleveland, OH, May 1975.
- 22. Thirty-day Field Tests of Industrial Boilers: Site 5 Gas-fired Low-NO_x Eurner, EPA-0007-81-095a, U. S. Environmental Protection Agency. Research Triangle Park, NC, 1429-1931.
- 23. Private communication from Kim Black (Industrial Combustion) to Ralph Harris (MRI), Independent Third Party Source Tests, February 7, 1992.



Department of Environmental Protection

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

Virginia B. Wetherell Secretary

July 9, 1997

Certified Mail - Return Receipt Requested

Mr. Rich Piper, Chair Florida Power Coordinating Group, Inc. 405, Reo Street, Suite 100 Tampa, Florida 33609-1004

Dear Mr. Piper:

Enclosed is a copy of a Scrivener's Order correcting an error in the Order concerning particulate matter testing of natural gas fired boilers.

If you have any questions concerning the above, please call Yogesh Manocha at 904/488-6140, or write to me.

Sincerely,

M. D. Harley, P.E., DEE

P.E. Administrator

5 King

Emissions Monitoring Section Bureau of Air Monitoring and

Mobile Sources

MDH:ym

cc: Dotty Diltz, FDEP Pat Comer, FDEP

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:)		
Florida Electric Power Coordinating Group, Inc.,)		ASP No. 97-B-01
Petitioner.)	,	

ORDER CORRECTING SCRIVENER'S ERROR

The Order which authorizes owners of natural gas fired fossil fuel steam generators to forgo particulate matter compliance testing on an annual basis and prior to renewal of an operation permit entered on the 17th day of March, 1997, is hereby corrected on page 4, paragraph number 4, by deleting the words "pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C.":

4. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., e., or d., F.A.C., the Department shall not require submission of particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.

DONE AND ORDERED this 2 day of July, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

HOWARD L. RHODES, Director

Division of Air Resources Management

Twin Towers Office Building

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

(904) 488-0114

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that a copy of the foregoing was mailed to Rich Piper, Chair, Florida Power Coordinating Group, Inc., 405 Reo Street, Suite 100, Tampa, Florida 33609-1004, on this $10^{\frac{1}{10}}$ day of July 1997.

Clerk Stamp

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

Qlerk ...

Date