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**HAND-DELIVERED**

August 12, 1997

Mr. Scott Sheplak  
Bureau of Air Regulation  
Florida Department of Environmental Regulation  
Mail Station #5505  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

**RECEIVED**  
**AUG 12 1997**  
**BUREAU OF**  
**AIR REGULATION**

**RE: Amendment to Title V Permit No. 1290001-001-AV  
City of Tallahassee  
Sam O. Purdom Generating Station**

Dear Mr. Sheplak:

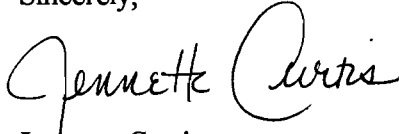
As discussed during our July 28, 1997 meeting at your offices, the City has drafted language for the amended Title V permit which also includes the draft PSD permit language (see attached). For your convenience, we have highlighted the revisions by striking through sections to be deleted and underlining sections to be added. In addition, an electronic version of the suggested Title V permit language has also been included.

As per your request, we also reviewed the compliance plan requirements of the Department and EPA. Upon further review, it is the City's understanding that Rule 62-213.440(2), F.A.C. provides that a compliance plan is required for each applicable requirement "for which one or more units within a source is not in compliance" on the date the draft permit is issued. Additionally, 57 Federal Register page 32274 (July 21, 1992, copy attached) provides that a schedule of compliance and periodic progress reports (i.e.: the Department's compliance plans) are only required for sources "not in compliance". The City is in compliance with all currently applicable requirements, and a permit condition has been suggested, consistent with the referenced Federal Register, to require compliance with future applicable requirements on a timely basis. This condition along with the requirement under general condition 51 in Attachment TV-1 to submit annual compliance statements should be sufficient without the need for additional compliance plans or schedules.

C:/winword/letters/sheplak1.doc

Thank you for your consideration of the attached suggested revisions to the Title V permit. As always, the City would like to continue open lines of communication with you and other Department staff in order to achieve an amended Title V permit that requires no further changes after the draft permit is issued. If you have any questions regarding the attached document, please feel free to contact either myself at 891-8850 or Karl Bauer at 891-8851.

Sincerely,

A handwritten signature in cursive script that reads "Jennette Curtis". The signature is written in black ink and is positioned above the printed name.

Jennette Curtis  
Environmental Administrator

Attachment

cc: Jonathan Holtom, FDEP  
Rob McGarrah, COT  
Gordon King, COT  
Karl Bauer, COT  
Doug Fulle, FWENC  
Darrel Graziani, FWENC  
Angela Morrison, HGSS

agrees that compliance plans containing schedules of compliance are required of all sources as part of the permit application.

Section 503(b)(1) of the Act establishes the requirement that application contain compliance plans and does not distinguish between sources in compliance or out of compliance with applicable requirements. Further evidence for requiring a compliance plan for complying sources is the reference in section 503(b)(1) to a compliance plan as a description of how the source will comply with applicable requirements. Additionally, section 503(c) of the Act clearly states that any person required to have a permit shall submit a compliance plan and an application for a permit.

The legislative history supports this conclusion. While the bill passed by the House required compliance plans from both complying and noncomplying sources, the bill passed by the Senate would have required compliance plans of only those complying sources subject to new requirements. S. 1630, section 352(b). In this regard, the statute reflects the provisions of the House Bill and does not contain the exception in the Senate Bill. It therefore appears that Congress considered and rejected even a limited exemption from the requirement to submit compliance plans for sources in compliance.

The proposal similarly required schedules of compliance only for sources not in compliance with all applicable requirements. As with compliance plans, the final rule requires schedules of compliance of all sources. This result is compelled by the language of section 503(b), which requires that each compliance plan include a schedule of compliance, as well as section 504(a), which states that each permit must contain a schedule of compliance.

However, EPA believes that the language of the statute suggests that schedules of compliance should receive different treatment where they are being applied to requirements for which the source is in compliance. Section 501(3) defines a schedule of compliance as "a schedule of remedial measures, including an enforceable sequence of actions or operations, leading to compliance" with applicable requirements (emphasis added). The phrases "remedial measures" and "leading to compliance" logically suggest the correction of a situation where a source is not in compliance. Further, it is unlikely that sources in compliance were intended to be subject to enforceable interim measures. In

addition, complying sources have already demonstrated an ability to comply with applicable requirements. The EPA believes that it would be burdensome and serve no useful purpose for these sources to submit detailed schedules of compliance.

In the final rule, EPA requires schedules of compliance for sources in compliance with all applicable requirements at the time of permit issuance to contain only a statement that the source will continue to comply with such requirements. With respect to any applicable requirement effective in the future, the schedule of compliance must contain a statement that the source will meet such requirements on a timely basis, unless the underlying applicable requirement requires a more detailed compliance schedule. Similarly, for complying sources, certified progress reports are not required unless detailed compliance plans are required by an applicable requirement. In the final rule, a compliance plan is required to be included in the permit application, but not in the permit for all sources.

(b) Applicable requirements effective in the future. The proposal required citation and description of applicable requirements, including requirements that become effective during the term of the permit, if such requirement has been promulgated at the time of permit application, but did not discuss such requirements in reference to compliance plans.

Several commenters maintained that failing to address future compliance dates in compliance plans is inconsistent with the Act requirement that SIPs contain such schedules.

The final rule requires that each schedule of compliance must contain information concerning future-effective applicable requirements. Furthermore, the definition of applicable requirement contained in § 70.2 has been modified to clarify that future-effective requirements that have been promulgated or approved by EPA at the time of permit issuance are applicable requirements for purposes of part 70 permits.

The Administrator agrees with commenters that subpart N of part 51 requires that SIPs contain legally enforceable compliance schedules for any requirements (including requirements with future-effective dates) applicable to stationary sources and that, therefore, these requirements are also applicable requirements for purposes of part 70 permits.

#### 7. Compliance Certifications

(a) Content of certifications. The proposed rule stated that, to be considered complete, a permit application must include, among other elements, a compliance certification for all applicable requirements. The

proposed discussion in some detail what is required of a source to meet these requirements. Commenting on the proposal, industry commenters requested several modifications of, or clarifications to, the compliance certification provisions regarding contents of certifications. The final rule regarding compliance certifications requirements for permit applications has been clarified in response to these comments.

Today's rule imposed two types of compliance certification requirements on part 70 sources. First, in § 70.5(c)(9), every application for a permit must contain a certification of the source's compliance status, with all applicable requirements, including any applicable enhanced monitoring and compliance certification requirements promulgated pursuant to section 114 and 504(b) of the Act. This certification must indicate the methods used by the source to determine compliance. This requirement is critical because the content of the compliance plan and the schedule of compliance required under § 70.5(a)(8) is dependent on the source's compliance status at the time of permit issuance.

The second type of compliance certification is imposed by § 70.6(c)(5). This section states that every part 70 permit must contain a requirement for the source to submit a compliance certification at least annually throughout the term of the permit. The contents of this compliance certification are drawn from sections 114(a)(3) and 503(b)(2) of the Act. This certification must: identify each term and condition of the permit that is the basis for certification; the source's compliance status with that requirement; whether compliance was continuous or intermittent; the method(s) used to determine compliance consistent with the monitoring requirements of § 70.6(a); and such other facts as the permitting authority may require to determine the compliance status of the source. The final rule differs from the proposal in that annual certification is now required with respect to the terms and conditions of the permit; the proposal required certification only with the applicable requirements. This change is necessary to conform to the express requirement of section 503(b)(2).

Each of the above compliance certifications must be certified by a responsible official for truth, accuracy and completeness, consistent with § 70.5(d).

(b) Responsible official for title IV sources. The proposed rule in § 70.5 required all part 70 sources subject to permitting requirements to submit a

City of Tallahassee  
Sam O. Purdom Generating Station  
Facility ID No.: 1290001  
Leon County

~~Initial~~ Title V Air Operation Permit  
~~PROPOSED~~ DRAFT Permit No.: 1290001-001-AV

**Permitting Authority**

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

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

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

Initial Title V Air Operation Permit

**PROPOSED DRAFT Permit No.: 1290001-001-AV**

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    ASP Number 97-B-01

    Table 1-1, Summary of Air Pollutant Standards and Terms

    Table 2-1, Summary of Compliance Requirements

**Permittee:**  
City of Tallahassee, Electric Utilities  
300 South Adams Street  
Tallahassee, Florida 32301

**PROPOSEDDRAFT Permit No.:** 1290001-001-AV  
**Facility ID No.:** 1290001  
**SIC Nos.:** 49, 4911  
**Project:** ~~Initial~~ Title V Air Operation Permit

This permit is for the operation of the Sam O. Purdom Generating Station. This facility is located at 667 Port Leon Drive, St. Marks, Wakulla County; UTM Coordinates: Zone 16, 769.5 km East and 3339.97 km North; Latitude: 30° 09' 47" North and Longitude: 84° 12' 10" 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 E-1, List of Exempt Emissions Units and/or Activities  
Appendix U-1, List of Unregulated Emissions Units and/or Activities  
Phase II Acid Rain Permit Application/Compliance Plan received December 20, 1995  
~~Permit Number 1290001-002-AC~~  
Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96)  
Appendix TV-1, Title V Conditions (version dated 2/27/97)

**Effective Date:** ~~January 1, 1998~~  
**Renewal Application Due Date:** July 5, 2002  
**Expiration Date:** December 31, 2002

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Howard L. Rhodes, Director  
Division of Air Resources  
Management

HLR/sms/jh

## **Section I. Facility Information.**

### **Subsection A. Facility Description.**

This facility currently consists of three pre-NSPS fossil fuel-fired steam generators, two pre-NSPS simple cycle combustion turbines and one Subpart Dc auxiliary boiler. One of the steam generators, Boiler Number 7, is an Acid Rain Phase II Unit. The total combined electrical generating capacity from the facility is a nominal 112.6 megawatts (MW), of which a nominal 88 megawatts are provided by the steam generators and a nominal 24.6 megawatts are provided by the combustion turbines. The fuels used at this facility are natural gas and various combination grades of fuel oil. The auxiliary boiler is only used as a source of steam for plant operations when none of the other steam generating units are operating. Also included in this permit are miscellaneous unregulated/exempt 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)~~ This permit authorizes the City of Tallahassee to operate the new combined cycle combustion turbine system, Unit 8, at the existing Purdom facility, consisting of a 160 MW (nominal rating) GE MS7231FA combustion turbine with DLN-2.6, or later version, dry low NO<sub>x</sub> (gas) and water injection (diesel) burners and a nonfired heat recovery steam generator (HRSG) with a nominal 90 MW steam turbine as authorized by Permit Number PSD-FL-239/PA97-36. The compressor inlet air will be conditioned by an evaporative cooler when needed. The turbine will be started using the generator and a static start system. A new 200 foot stack and a cooling tower will be added to the facility for Unit 8.

Existing steam generating Units 5 and 6 will be permanently shut down once Unit 8 has completed the initial performance test.

The use of 'Permitting Notes' throughout this permit are for informational purposes, only, and are not permit conditions.

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

#### Regulated Emissions Units:

#### E.U. ID

#### No.

#### Brief Description

-005	Boiler Number 5 - 300 MMBtu/hour
-006	Boiler Number 6 - 300 MMBtu/hour
-007	Boiler Number 7 - 621 MMBtu/hour (Acid Rain, Phase II Unit)
-008	Combustion Turbine Number 1 (GT1) - 228 MMBtu/hour
-009	Combustion Turbine Number 2 (GT2) - 228 MMBtu/hour
-011	Auxiliary Boiler
-012	Combustion Turbine Unit 8 - 1659.5 MMBtu/hr (Acid Rain, Phase II Unit)

Unregulated emissions Units and/or Activities (See Appendix U-1):

E.U. ID

<u>No.</u>	<u>Brief Description</u>
-010	Fugitive VOC Sources - Painting Operations
-xxx	General Purpose Engines
-yyy	Emergency Generators

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

**Subsection C. Relevant Documents.**

The following documents are part of this permit:

Appendix E-1, List of Exempt Emissions Units and/or Activities  
Appendix U-1, List of Unregulated Emissions Units and/or Activities  
Phase II Acid Rain Permit Application/Compliance Plan received December 20, 1995  
Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96)  
Appendix TV-1, Title V Conditions (version dated 2/27/97)  
~~Permit Number-1290001-002-AC~~  
~~BACT Determination Dated October 8, 1996~~  
ASP Number 97-B-01  
Scrivener's Order Correcting ASP Number 97-B-01 (dated July 9, 1997)

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

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

Appendix H-1, Permit History / ID Number Changes  
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 2/5/97)  
Table 1-1, Summary of Air Pollutant Standards and Terms  
Table 2-1, Summary of Compliance Requirements

These documents are on file with the permitting authority:

Initial Title V Permit Application Received June 14, 1996  
Additional Information Request Dated September 26, 1996  
Additional Information Response Received December 24, 1996  
City of Tallahassee Letter Dated March 7, 1997  
City of Tallahassee Letter Dated March 21, 1997  
City of Tallahassee Letter Dated April 16, 1997  
City of Tallahassee Letter Dated April 25, 1997  
Jonathan Holtom Memo to file dated May 9, 1997  
City of Tallahassee Letter Dated June 24, 1997  
Site Certification Application Dated March 7, 1997  
Permit Number PSD-FL-239/PA97-36





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

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

1. Appendix TV-1, Title V Conditions (version dated 2/27/97), 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 one 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. Prevention of Accidental Releases (Section 112(r) of CAA). 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]

4. Exempt Emissions Units and/or Activities. Appendix E-1, List of Exempt 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.]

5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.

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

6. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

{Permitting Note: No vapor emission control devices or systems are deemed necessary nor ordered by the Department as of the issuance date of this permit.}

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

7. 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.

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

8. **Not federally enforceable.** Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

- a. The portable concrete mixer shall be operated on an as-needed basis. Reasonable precautions include enclosing the activity where practical.
- b. Abrasive blasting activities that are associated with normal maintenance and corrosion control activities shall be enclosed where practical.
- c. Unconfined emissions associated with the limited on-site traffic shall be controlled by limiting vehicle speeds and unnecessary traffic within the plant grounds
- d. During construction activities for Unit 8 a combination of the following techniques will be implemented:
  1. Contractors will be instructed to comply with any applicable state and local regulations governing open-bodied trucks hauling sand, gravel, or soil between on-site and off-site areas.
  2. Areas disturbed during construction will be stabilized by mulching or seeding as soon as practicable.
  3. When construction occurs on bare ground, water (possibly together with non-hazardous wetting agents) will be used as necessary to help suppress dust, as needed.
  4. Temporary vehicular surfaces of crushed rock may be used in high traffic areas. Areas not subject to heavy traffic or continual disturbance will be wetted down as needed using nontoxic substances to help suppress dust.
  5. Sandblasting operations will be localized to minimize effects on adjacent work areas. Protective covers will also be utilized where practicable.
  6. Surface coating activities will include the initial painting of the Combined Cycle Unit 8 and the associated facilities. Activities will be enclosed whenever practical.

[Rule 62-296.320(4)(c)2., F.A.C.; and, proposed by applicant in initial Title V permit application received June 14, 1996, and amended by comments received April 25, 1997, and by March 7, 1997 Site Certification Application.]

{Permitting Note: Condition No. 8 presents the reasonable precautions to be implemented in accordance with Rule 62-296.320(4)(c)2., F.A.C. in lieu of the requirements of Condition Number 58 of Appendix TV-1.}

9. **Not federally enforceable.** The Department's Northwest District Branch Office (Tallahassee) telephone number for reporting problems, malfunctions or exceedances under this permit is (904)850-488-

3704, day or night, and for emergencies involving a significant threat to human health or the environment is (904850) 413-9911. The Department's Northwest District Office (Pensacola) telephone number for routine business, including compliance test notifications, is (904850) 444-8364 during normal working hours.

10. **Not federally enforceable.** The permittee shall submit all compliance related notifications and reports required by this permit to the Department's Northwest District Office located at: 160 Governmental Center, Pensacola, Florida 32501-5794.

~~11. **Not federally enforceable.** This permit does not provide any authorization for the construction or operation of the new combined cycle combustion turbine (Unit No. 8) and cooling tower that are contained in the Florida Electrical Power Plant Siting Certification application received March 7, 1997. [Rules 62-4.160 and 62-210.300(1) & (2), F.A.C.]~~

### Miscellaneous

~~12. On or before the effective date of this permit (but no later than January 2, 1998) and after the last fuel oil delivery prior to the effective date of this permit, a one-time sample and analysis of the existing fuel oil in the storage tanks that provide fuel oil to Boilers Number 5, Number 6 and Number 7 is required to verify that all of the fuel oil sulfur content, percent by weight, is at or below that which is specified in specific condition A.11. Thereafter, e.l.l. Compliance with the allowable fuel oil sulfur contents specified in this permit will be demonstrated by retaining the fuel oil vendor's delivery receipt providing the sulfur content, percent by weight, of the as-delivered fuel oil. [Rule 62-213.440, F.A.C.]~~

12. Oxides of Nitrogen - Facility Wide Cap. Beginning with the calendar year following successful completion of the initial performance test for Unit 8, annual emissions of NO<sub>x</sub> shall not exceed 467 tons per year from the Purdom facility (Unit 8, Unit 7, GT1, GT2, and the auxiliary boiler) on a calendar year basis, as measured by applicable compliance methods. See common condition C.22. [PSD-FL-239/PA97-36]

13. Sulfur Dioxide - Facility Wide Cap. Beginning with the calendar year following successful completion of the initial performance test for Unit 8, annual emissions of SO<sub>2</sub> shall not exceed 80 tons per year from the Purdom facility (Unit 8, Unit 7, GT1, GT2, and the auxiliary boiler) on a calendar year basis, as measured by applicable compliance methods. See common condition C.23. [PSD-FL-239/PA97-36]

14. Compliance Schedule. The permittee shall comply with all applicable requirements effective in the future on a timely basis.

**Section III. Emissions Unit(s).**

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

**E.U. ID Brief Description**  
**No.**

-005 Boiler Number 5  
-006 Boiler Number 6

These emissions units are ~~Combustion-Engineering~~ steam generators designated as “Boiler Number 5” and “Boiler Number 6”. Boiler Number 5 is tangentially fired. Each boiler is rated at a maximum heat input of 300 million Btu per hour (MMBtu/hour) while being fueled with natural gas and/or No. 2 thru No. 6 fuel oil. Each boiler nominally produces 220,000 pounds of steam per hour to run a nominal 22 megawatt (electric) turbine-generator (one each).

{Permitting notes: These units pre-date PSD regulations, but are regulated under Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators With More Than 250 Million BTU per Hour Heat Input. Boiler Number 5 began commercial operation in 1958. Boiler Number 6 began commercial operation in 1961. Stack height = 125 feet, exit diameter = 13.0 feet, exit temperature = 344 °F, actual volumetric flow rate = 94,400 acfm. The exhausts from Boiler Number 5 and Boiler Number 6 share the same physical stack. Emissions from the boilers are ~~uncontrolled~~controlled by proper combustion practices.}

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

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

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

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
5	300	Natural Gas
	300	No. 2 thru No. 6 Fuel Oil
6	300	Natural Gas
	300	No. 2 thru No. 6 Fuel Oil

[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 C.11.

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

A.3. Methods of Operation - Fuels. The only fuels allowed to be burned in these boilers are natural gas and/or new No. 2 thru No. 6 fuel oil.

[Rule 62-213.410, F.A.C.; and, Applicant Request dated June 24, 1997.]

A.4. Hours of Operation. These emissions units may operate continuously, i.e. 8760 hours/year. The permittee shall maintain an operation log available for Department inspection that documents the total

hours of annual operation, including a detailed account of the hours operated on each of the allowable fuels.

[Rule 62-210.200(PTE), F.A.C.; and, AO65-242831, Specific Condition #3.]

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

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

A.6. **Visible Emissions - Soot Blowing and Load Change.** Visible emissions shall not exceed 60 percent opacity during the 3--hours in any 24--hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

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

[Rule 62-210.700(3), F.A.C.]

A.7. **Particulate Matter.** Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods.

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

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. **Sulfur Dioxide.** When burning liquid fuel, sulfur dioxide emissions shall not exceed 1.87 pounds per million Btu heat input, as measured by applicable compliance methods. However, the permittee has requested a lower limit of 1.3 pounds per million Btu heat input, as measured by applicable compliance methods.

[Rules 62-296.405(1)(c)1.h. & 62-204.240(1)(a), F.A.C.; and, requested by applicant in initial Title V permit application received June 14, 1996.]

A.10. **Sulfur Dioxide - Sulfur Content.** The No. 2 thru No. 6 fuel oil sulfur content shall not exceed 1.20 percent, by weight. See specific condition A.17. and common condition C.9.

[Rule 62-296.405(1)(e)3., F.A.C.; and, requested in a letter by applicant dated March 21, 1997.]

A.11. This emissions unit is also subject to the conditions contained in **Subsection C. Common Conditions**, as specified below.

**Excess Emissions**

A.12. See common conditions C.1. - C.3.

**Monitoring of Operations**

A.13. **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., C.8. and C.9.

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

A.14. **Determination of Process Variables**. See common condition C.4.

**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.15. **Visible Emissions**. See common conditions C.5., C.6. and C.16.

A.16. **Particulate Matter**. See common conditions C.7. ~~and C.17.~~ **C.17 and C.21.**

A.17. **Sulfur Dioxide**. See specific condition A.13. and common conditions C.8. and C.9.

A.18. **Operating Rate During Testing**. See common condition C.11.

A.19. **Calculation of Emission Rate**. See common condition C.12.

A.20. **Applicable Test Procedures**. See common condition C.13.

A.21. **Required Stack Sampling Facilities**. See common condition C.14.

A.22. **Frequency of Compliance Tests**. See common condition C.15.

**Recordkeeping and Reporting Requirements**

A.23. See common conditions C.18. - C.20.

**Reasonable Assurances**

A.24. Fuel Oil Storage Tank and Piping Restrictions. No fuel oil shall be placed into the fuel oil storage tanks, which are connected by a single pipe-line at this time and used to supply fuel oil to Boilers Number 5, Number 6 and Number 7, that exceeds the sulfur limitation specified in specific condition **A.10.**, until Boilers Number 5 and Number 6 are permanently shutdown or separate piping is installed between the fuel oil storage tanks and Boilers 5 and 6 and Boiler 7.

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

**Miscellaneous**

A.25. Permanent Shutdown. Boilers Number 5 and Number 6 are to be permanently shut down once Unit 8 has completed the initial performance test.

[PSD-FL-239/PA97-36 and Applicant's Request in Site Certification Application dated March 7, 1997.]



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

**E.U. ID Brief Description**  
**No.**

-007 Boiler Number 7, (Phase II Acid Rain Unit)

This is a Riley Stoker Corporation model RX-33 steam generator designated as "Boiler Number 7". It is rated at a maximum heat input of 621 MMBtu/hour while being fueled with natural gas and/or No. 2 thru No. 6 fuel oil. It nominally produces 500,000 pounds of steam per hour to run a nominal 44 MW turbine-generator.

{Permitting notes: This emissions unit is regulated under Acid Rain, Phase II. This unit pre-dates PSD regulations, but is regulated under Rule 62-296.405, F.A.C., Fossil Fuel Steam Generators With More Than 250 Million BTU per Hour Heat Input. Boiler Number 7 began commercial operation in 1966. Stack height = 180 feet, exit diameter = 9.0 feet, exit temperature = 300 °F, actual volumetric flow rate = 180,798 acfm. Emissions from this boiler are ~~uncontrolled~~ controlled by proper combustion practices. }

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

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

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

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
7	621	Natural Gas
	621	No. 2 thru No. 6 Fuel Oil; On-Specification Used Oil

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.405, F.A.C.; and, Applicant's request.]

B.2. **Emissions Unit Operating Rate Limitation After Testing.** See specific condition C.11.

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

B.3. **Methods of Operation - Fuels.** The fuels that are allowed to be burned in this boiler are natural gas and/or new No. 2 thru No. 6 fuel oil and/or on-specification used oil. (See Specific Condition B.24.)

[Rule 62-213.410, F.A.C.; and, Applicant Request dated June 24, 1997.]

B.4. Hours of Operation. This emissions unit may operate continuously, i.e. 8760 hours/year. The permittee shall maintain an operation log available for Department inspection that documents the total hours of annual operation, including a detailed account of the hours operated on each of the allowable fuels.

[Rule 62-210.200(PTE), F.A.C.; and, AO65-242831, Specific Condition #3.]

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

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

B.6. Visible Emissions - Soot Blowing and Load Change. Visible emissions shall not exceed 60 percent opacity during the 3<sub>..</sub>-hours in any 24<sub>..</sub>-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

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

[Rule 62-210.700(3), F.A.C.]

B.7. Particulate Matter. Particulate matter emissions shall not exceed 0.1 pound per million Btu heat input, as measured by applicable compliance methods.

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

B.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<sub>..</sub>-hours in any 24<sub>..</sub>-hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change.

[Rule 62-210.700(3), F.A.C.]

B.9. Sulfur Dioxide. When burning liquid fuel, sulfur dioxide emissions shall not exceed 1.87 pounds per million Btu heat input, as measured by applicable compliance methods.

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

B.10. Sulfur Dioxide - Sulfur Content. The No. 2 thru No. 6 fuel oil sulfur content shall not exceed 1.70 percent, by weight. See specific condition B.17. and common condition C.9.

[Rule 62-296.405(1)(e)3., F.A.C.; and, requested by applicant in a letter dated April 16, 1997.]

B.11. This emissions unit is also subject to the conditions contained in Subsection C. Common Conditions, as specified below.

**Excess Emissions**

B.12. See common conditions C.1. - C.3.

**Monitoring of Operations**

{Permitting Note: In accordance with the Acid Rain Phase II requirements, the following continuous monitors are installed on this unit: Gas Fuel Flow, Oil Fuel Flow, NO<sub>x</sub> and CO<sub>2</sub>.}

B.13. 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 B.10., C.8. and C.9.

[Rule 62-296.405(1)(f)1.b., F.A.C.; and, requested by applicant in a letter dated April 16, 1997.]

B.14. Determination of Process Variables. See common condition C.4.

**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.}

B.15. Visible Emissions. See common conditions C.5., C.6. and C.16.

B.16. Particulate Matter. See common conditions C.7. and ~~C.17.~~ C.17 and C.21.

B.17. Sulfur Dioxide. See specific condition B.13 and common conditions C.8. and C.9.

B.18. Operating Rate During Testing. See common condition C.11.

B.19. Calculation of Emission Rate. See common condition C.12.

B.20. Applicable Test Procedures. See common condition C.13.

B.21. Required Stack Sampling Facilities. See common condition C.14.

B.22. Frequency of Compliance Tests. See common condition C.15.

**Recordkeeping and Reporting Requirements**

B.23. See common conditions C.18. - C.20.

**Miscellaneous Conditions.**

B.24. Used Oil. Burning of on-specification used oil is allowed at this emissions unit in accordance with all other conditions of this permit and the following conditions:

- a. On-specification Used Oil Emissions Limitations: This emissions unit is permitted to burn on-specification used oil, which contains a PCB concentration of less than 50 ppm. On-specification used oil is defined as used oil that meets the specifications of 40 CFR 279 - Standards for the Management of Used Oil, listed below. "Off-specification" used oil shall not be burned. Used oil which fails to comply with any of these specification levels is considered "off-specification" used oil.

CONSTITUENT/PROPERTY	ALLOWABLE LEVEL
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash point	100 degrees F minimum

- b. Quantity Limitation: This emissions unit is permitted to burn "on-specification" used oil that is generated by the City of Tallahassee in the production and distribution of electricity, not to exceed 10,000 gallons during any consecutive 12 month period.
- c. PCB Limitation: Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement.
- d. Operational Requirements: On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall not be burned during periods of startup or shutdown.
- e. Testing Requirements: The owner or operator shall sample and analyze each batch of used oil to be burned for the following parameters:

Arsenic, cadmium, chromium, lead, total halogens, flash point and PCBs.

Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).

- f. Record Keeping Requirements: The owner or operator shall obtain, make, and keep the following records related to the use of used oil in a form suitable for inspection at the facility by the Department: [40 CFR 279.61 and 761.20(e)]

- (1) The gallons of on-specification used oil generated and burned each month. (This record shall be completed no later than the fifteenth day of the succeeding month.)
- (2) The total gallons of on-specification used oil burned in the preceding consecutive 12-month period. (This record shall be completed no later than the fifteenth day of the succeeding month.)
- (3) Results of the analyses required above.

g. Reporting Requirements: The owner or operator shall submit to the Northwest District office, within thirty days of the end of each calendar quarter, the analytical results and the total amount of on-specification used oil generated and burned during the quarter.

The owner or operator shall submit, with the Annual Operation Report form, the analytical results and the total amount of on-specification used oil burned during the previous calendar year.

[Rule 62-4.070(3) and 62-213.440, F.A.C., 40 CFR 279 and 40 CFR 761, unless otherwise noted.]

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**Subsection C. Common Conditions.**

{Permitting Note: The following conditions are common to Boilers No. 5, 6 and 7, as specified in Subsections A and B, above, and to the auxiliary boiler and Unit 8 as specified in Subsections E and F, below. They are placed here as a convenience and to avoid duplication.}

**Excess Emissions**

C.1. 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.]

C.2. 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.]

C.3. 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.4. 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**

C.5. Visible Emissions. 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 C.6.

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

C.6. DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

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

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

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

C.7. 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.]

C.8. 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., B.10. and C.9.

[Rules 62-213.440, 62-296.405(1)(e)3. and 62-297.401, F.A.C.; and, AO65-242831.]

C.9. 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 test method.

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

### **Compliance Test Requirements**

C.10. 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.]

C.11. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. 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.]

C.12. 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.]

C.13. Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

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

- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1.



TABLE 297.310-1  
 CALIBRATION SCHEDULE

<u>ITEM</u>	<u>FREQUENCY</u>	<u>INSTRUMENT</u>	<u>TOLERANCE</u>
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	Spirometer or calibrated wet test or	2%
	_____Semiannually _____3. Check after _____each test series	Comparison check	5%

(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.]

C.14. 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.]

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.

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 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 Title V 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 Title V 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.
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.
  10. An annual compliance test conducted for visible emissions shall not be required for units exempted from permitting at Rule 62-210.300(3)(a), F.A.C., or units permitted under the General Permit provisions at Rule 62-210.300(4), F.A.C.
- (b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall 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, AO65-242831, Specific Condition #5 (frequency).]

C.16. Visible Emissions Testing - Annual. 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.

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

C.17 Particulate Matter testing - Annual and Permit Renewal. Annual and permit renewal compliance testing for particulate matter 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)3. & 5., F.A.C.; and, ASP Number 97-B-01.]

**Recordkeeping and Reporting Requirements**

{Permitting Note: The reports that are required by the following conditions are to be sent to the Department of Environmental Protection's Northwest District Office, 160 Governmental Center, Pensacola, Florida 322501-5794}

C.18. In the case of excess emissions resulting from malfunctions, each the 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.  
[Rule 62-210.700(6), F.A.C.]

C.19. ~~S~~The owner or operator shall 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.]

C.20. 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.

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

#### **Miscellaneous Conditions**

C.21. If particulate matter and visible emissions tests are required, the tests shall be conducted concurrently and shall be performed using the maximum fuel oil/natural gas ratio that can be fired while meeting the standards.

[Rule 62-4.070(3), F.A.C.; and, Applicant request dated April 25, 1997.]

C.22. Compliance with Annual Facility-wide NO<sub>x</sub> Cap. Compliance with the annual facility-wide NO<sub>x</sub> cap shall be determined by adding the annual NO<sub>x</sub> emissions in tons per year determined by the CEMS required by 40 CFR 75 for Unit 8 along with existing Unit 7 to annual NO<sub>x</sub> emissions calculated for existing units GT1, GT2 and the auxiliary boiler determined by the following formulas:

GT 1 & GT 2 NO<sub>x</sub>(natural gas)= (Fuel Usage )X (Heating Value of Natural Gas) X (0.44 lb/mmBtu) X units conversion factors

Fuel Usage shall be measured by fuel meter, recorded daily when unit is operated

Heating Value of Natural Gas will be determined from fuel supplier data

0.44 lb/mmBtu = AP-42 emission factor

GT 1 & GT 2 NO<sub>x</sub> (fuel oil)= (Fuel Usage )X (Heating Value of Fuel Oil) X (0.698 lb/mmBtu)

Fuel Usage shall be measured by fuel meter, recorded daily when unit is operated

Heating Value of Fuel Oil will be determined from fuel supplier data

0.698 lb/mmBtu = AP-42 emission factor

Aux. Boiler NO<sub>x</sub>(natural gas)= (Fuel Usage )X (140 lb/mmCF)

Fuel Usage shall be measured by flow meter, recorded daily when unit is operated

140 lb/mmCF = AP-42 emission factor



C.23. Compliance with Annual Facility-wide SO<sub>2</sub> Cap. Compliance with the annual facility-wide SO<sub>2</sub> cap shall be determined by adding the annual SO<sub>2</sub> emissions in tons per year determined by the methods required by 40 CFR 75 for Unit 8 along with existing Unit 7 to annual SO<sub>2</sub> emissions calculated for existing units GT1, GT2 and the auxiliary boiler determined by the following formulas:

**GT 1 & GT 2 SO<sub>2</sub> Emissions (natural gas) = (Fuel Usage ) X (Heating Value of Natural Gas) X (0.0006 lb/mmBtu)**

Fuel Usage shall be measured by fuel meter, recorded daily when unit is operated

Heating Value of Natural Gas from fuel supplier data

Sulfur Content default of NADB = 0.0006 lb-SO<sub>2</sub>/mmBtu

**GT 1 & GT 2 SO<sub>2</sub> Emissions (fuel oil) = (Fuel Usage ) X (Fraction Sulfur in the fuel oil) X (Molecular weight SO<sub>2</sub> / Molecular weight of S) X (Conversion factor)**

Fuel Usage shall be measured by fuel meter, recorded daily when unit is operated

% Sulfur will be determined from fuel oil analysis each time fuel is delivered (i.e., 0.05% S = 0.0005 in the above formula)

Molecular weight of SO<sub>2</sub> = 64

Molecular weight of S = 32

Conversion factor of 95% = 0.95

**Aux. Boiler SO<sub>2</sub> Emissions (natural gas) = (Fuel Usage ) X (Heating Value of Natural Gas) X (0.0006 lb/mmBtu)**

Fuel Usage shall be measured by fuel meter, recorded daily when unit is operated

Heating Value of Natural Gas from fuel supplier data

Sulfur Content default of NADB = 0.0006 lb/mmBtu

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**Subsection D. This section addresses the following emissions units.**

**E.U. ID Brief Description**  
**No.**

-008	Combustion Turbine Number 1
-009	Combustion Turbine Number 2

These emissions units are simple cycle combustion turbines manufactured by Westinghouse (model number W171G) and are designated as "Combustion Turbine Number 1" and "Combustion Turbine Number 2". They are each rated at a maximum heat input of 228 million Btu per hour (MMBtu/hour) while being fueled by natural gas and/or No. 2 fuel oil. These combustion turbines ~~are used as peaking units during peak demand times, during emergencies, and during controls testing,~~ to run a nominal 12.3 MW generator (each). Emissions from the combustion turbines are ~~uncontrolled~~ controlled by good combustion practices.

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. These units are not subject to 40 CFR 60, Subpart GG, Standards of Performance for New Stationary Gas Turbines. Combustion Turbine Number 1 began commercial operation in 1963. Combustion Turbine Number 2 began commercial operation in 1963. Each combustion turbine has its own stack. Stack height = 38 feet, exit diameter = 10 feet, exit temperature = 880 °F, actual volumetric flow rate = 395,080 acfm.}

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

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

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

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
8	228 (LHV @ 80 degrees Fahrenheit)	Natural Gas
	228 (LHV @ 80 degrees Fahrenheit)	No. 2 Fuel Oil
9	228 (LHV @ 80 degrees Fahrenheit)	Natural Gas
	228 (LHV @ 80 degrees Fahrenheit)	No. 2 Fuel Oil

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

D.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **D.13**.  
[Rule 62-297.310(2), F.A.C.]

D.3. Methods of Operation - Fuels. Only natural gas and/or new No. 2 fuel oil shall be fired in these turbines.  
[Rule 62-213.410, F.A.C.]

D.4. Hours of Operation. ~~Until the initial performance test on Unit 8 has been completed, each combustion turbine may operate 6993 hours per year. After that time, the hours of operation are not limited, but the units are subject to the NO<sub>x</sub> and SO<sub>2</sub> facility-wide emission caps.~~ The permittee shall

maintain an operation log available for Department inspection that documents the total hours of annual operation, including a detailed account of the hours operated on each of the allowable fuels.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AO65-242827, Specific Condition #3.]

### **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.}

D.5. Visible Emissions. 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, AO65-242827.]

D.6. ~~Not federally enforceable.~~ Sulfur Dioxide - Sulfur Content. The sulfur content of the No. 2 fuel oil shall not exceed 0.4 percent, by weight. After the initial performance test for Unit 8 is completed, the sulfur content of the No. 2 fuel oil shall not exceed 0.05 percent, by weight. See specific condition **D.12.**

[AO65-242827; and, applicant request on initial Title V application received June 14, 1996.]

### **Excess Emissions**

D.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.]

D.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**

D.9. Sulfur Dioxide. 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 conditions **D.6.** and **D.12.**

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

D.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.}

D.11. **Visible emissions.** 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.]

D.12. **Sulfur Content.** 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 test method.

[Rules 62-213.440 and 62-297.440, F.A.C.]

D.13. **Not federally enforceable. — Operating Rate During Testing.** Testing of emissions shall be conducted with each 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 ~~source~~source ~~this unit~~ 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.

[AO65-242827 Specific Condition No. 2; and, Applicant Request dated June 24, 1997.]

D.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., F.A.C.]

D.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 Title V 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 Title V 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.

~~10. An annual compliance test conducted for visible emissions shall not be required for units exempted from permitting at Rule 62-210.300(3)(a), F.A.C., or units permitted under the General Permit provisions at Rule 62-210.300(4), F.A.C.~~

(b) Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall 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.

[Rule 62-297.310(7), F.A.C.; and, AO65-242827, Specific Condition #5 (frequency).]

D.16. Visible Emissions Testing - Annual. 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**

{Permitting Note: The reports that are required by the following conditions are to be sent to the Department of Environmental Protection's Northwest District Office, 160 Governmental Center, Pensacola, Florida 322501-5794}

D.17. Malfunction Reporting. 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.

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

D.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.]



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

<u>E.U. ID</u>	<u>Brief Description</u>
No. -011	Auxiliary Boiler

This is a Kewanee model H3S-400-G steam generator rated at a maximum heat input of 16.74 MMBtu/hour while being fueled with natural gas.

{Permitting note(s): This emissions unit is regulated under 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. However, since it is only permitted to combust natural gas, the standards, the monitoring and the associated reporting requirements contained in Subpart Dc do not apply, with the exception that the reporting requirements pertaining to "start-up", as referenced in 40 CFR 60.7, do apply. ~~Except for compliance testing, this boiler may only operate when Boilers Number 5, Number 6 and Number 7, and Unit 8 are not operating;~~ therefore, there will be no significant increase in emissions for PSD purposes. Stack height = 30 feet, exit diameter = 2.0 feet, exit temperature = 420 °F, actual volumetric flow rate = 4,000 acfm (exit temperature and flow rate estimated by manufacturer service representative). Emissions from this boiler are ~~uncontrolled~~ controlled by good combustion practices.}

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

~~E.1. All of the terms and conditions of permit number 1290001-002-AC are a part of this permit (see attachment 1290001-002-AC), except for the following changes to condition number 12:~~

~~Exception to Specific Condition Number 12. The Professional Engineer's certification that construction of the auxiliary boiler was completed according to the permit application and associated documents must be submitted to the Department within 105 days after achieving the maximum production rate at which the unit will be operated, but no later than 180 days after initial start-up of the emission unit.~~

~~Operation of the auxiliary boiler beyond the time frames established by permit number 1290001-002-AC is allowed, and the conditions of this section apply, only after the Department has received and verified a properly signed and sealed certification from the permittee's Professional Engineer stating that 1) the construction of the auxiliary boiler was completed in accordance with permit number 1290001-002-AC (issued December 5, 1996) and 2) the unit has properly demonstrated compliance with the terms and conditions contained therein.~~

~~[Rules 62-212.400(7)(b) and 62-213.420(1)(a)5., F.A.C.]~~

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

E.2. 1. Permitted Capacity. The maximum operation heat input rate is as follows:

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
11	16.74	Natural Gas

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

E.3.—2 Emissions Unit Operating Rate Limitation After Testing. See common condition C.11.  
[Rule 62-297.310(2), F.A.C.]

E.4.—3 Methods of Operation - Fuels. Only natural gas shall be fired in this boiler.  
[Rules 62-4.160(2) and 62-213.440(1), F.A.C.]

E.5.—4 Hours of Operation. This emissions unit may operate 2,000 hours/year as an auxiliary source of steam, but, except for compliance testing, may only operate when the existing steam generating units (Boilers Number 5, Number 6 and Number 7) and Unit 8 are not operating. The Permittee shall maintain an operation log available for Department inspection certifying the total hours of operation and fuel consumption annually.  
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; 1290001-002-AC; and, initial Title V permit application as amended December 24, 1996.]

#### **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.}

E.6.—5 Visible Emissions. Visible emissions shall not exceed 20 percent opacity, except for one two-minute period per hour during which opacity shall not exceed 40 percent.  
[Rule 62-296.406(1), F.A.C.]

E.7.—6 Particulate Matter. Particulate matter emissions shall be controlled by the firing of natural gas.  
[Rule 62-296.406(2), F.A.C.; and, BACT determination dated October 8, 1996.]

E.8.—7 Sulfur Dioxide. Sulfur dioxide emissions shall be controlled by the firing of natural gas.  
[Rule 62-296.406(3), F.A.C.; and, BACT determination dated October 8, 1996.]

#### **Excess Emissions**

E.9.—8 Excess emissions 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.]

~~E.10.—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.]~~

**Monitoring of Operations**

**E.119. 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.]

E.120. This emissions unit is also subject to the conditions contained in **Subsection C. Common Conditions**, as specified below.

**Test Methods and Procedures**

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

E.131. **Visible Emissions.** See common conditions C.5. and C.6.

E.142. **Operating Rate During Testing.** See common condition C.11.

E.153. **Applicable Test Procedures.** See common condition C.13.(a)2.

E.164. **Frequency of Compliance Tests.** See common condition C.15. except (a)5. & 8.

E.175. **Visible Emissions - Annual.** By this permit, annual emissions compliance testing for visible emissions is not required for this emissions unit.

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

**Recordkeeping and Reporting Requirements**

E.186. The permittee shall record and maintain records of the amount of natural gas combusted during each day the auxiliary boiler is operated.

[40 CFR 60.48c(g)]

E.197. See common conditions C.18. and C.20.(a) & (b).

City of Tallahassee, Electric Department  
Sam O. Purdom Generating Station

**PROPOSED DRAFT Permit No.:** 1290001-001-AV

**Subsection F. This section addresses the following emission unit(s).**

<u>E.U. ID No.</u>	<u>Brief Description</u>
-012	Combustion Turbine Unit 8 (Phase II Acid Rain Unit)

This is a new combined cycle combustion turbine system, consisting of a 160 MW (nominal rating) GE MS7231FA combustion turbine with DLN-2.6, or later version, dry low NO<sub>x</sub> (gas) and water injection (diesel) burners and a nonfired heat recovery steam generator (HRSG) with a nominal 90 MW steam turbine.

{Permitting Note(s): This emissions unit is regulated under 40 CFR60, Subpart GG - Standards of Performance for New Stationary Sources; Gas Turbines. However, since the unit will utilize a continuous emissions monitoring system (CEMS), some of the monitoring and associated reporting requirements in Subpart GG do not apply. Stack height = 200 feet; exit diameter = 16.5 feet; exit temperature = 171°F - 205°F, depending upon fuel, ambient temperature and load; actual volumetric flow rate = 0.6 x 10<sup>6</sup> - 1.1 x 10<sup>6</sup> acfm depending upon fuel, ambient temperature and load (exit temperatures and flows based on manufacturer data). Emissions from this combined cycle combustion turbine unit are controlled by a dry low NO<sub>x</sub> burner (gas) and water injection (diesel), fuel choice, and good combustion practices. }

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

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

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

<u>Unit No.</u>	<u>MMBtu/hr Heat Input</u>	<u>Fuel Type</u>
8	1,467.7 (LHV @ 95°F, 60% RH, and 14.7 psia)	Natural Gas
8	1,659.5 (LHV @ 95°F, 60% RH, and 14.7 psia)	No. 2 Fuel Oil

These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) at least 90 days prior to initial compliance testing. These curves or equations shall be used to establish the maximum allowable heat inputs at other ambient conditions for compliance determinations.

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

F.2. Methods of Operation and Fuels. Only natural gas or No. 2 fuel oil with a maximum sulfur content of 0.05% by weight shall be fired in the combined cycle combustion turbine.

[Rule 62-4.160(2) and 62-213.440(i), F.A.C.]

F.3. Hours of Operation. Purdom Unit 8 may operate continuously (i.e., 8,760 hours per year).

[Rule 62-4.160(2)]

**Emission Limitations and Standards**

F.4. Sulfur Dioxide. Emissions of sulfur dioxide shall be limited by the exclusive use of natural gas and fuel oil with a sulfur content of 0.05% or less, by weight.

[Rule 62-212.400(6), F.A.C.]

F.5. Particulate Matter and PM<sub>10</sub>. Emissions of particulate matter and PM<sub>10</sub> shall be limited by the exclusive use of natural gas and fuel oil with a sulfur content of 0.05% or less, by weight.  
[Rule 62-212.400(6), F.A.C.]

F.6. Visible Emissions. Visible emissions shall not exceed 10 percent opacity when firing either natural gas or No. 2 fuel oil. Drift eliminators shall be installed on the cooling tower to reduce PM/PM<sub>10</sub> emissions.  
[Rule 62-212.400(6), F.A.C.]

F.7. Oxides of Nitrogen. Oxides of nitrogen emissions when firing natural gas shall not exceed 12 ppmvd at 15% O<sub>2</sub> (not corrected to ISO conditions) on a 30-day rolling average basis (excluding periods of startup, shutdown, malfunction or fuel switching), as measured by CEMS. When monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate the 30 day rolling average.  
[Rule 62-212.400(6), F.A.C.]

F.8. Oxides of Nitrogen. Oxides of nitrogen emissions when firing No. 2 fuel oil shall not exceed 42 ppmvd at 15% O<sub>2</sub> (not corrected to ISO conditions) plus the allowance for the fuel bound nitrogen, on a 30-day rolling average basis (excluding periods of startup, shutdown, malfunction or fuel switching), as measured by applicable compliance measures. For fuel bound nitrogen values (up to 0.03 percent), the allowance shall be determined by the following formula:

$$\text{STD} = 0.0042 + F \text{ where:}$$

STD = allowable NO<sub>x</sub> emissions (percent by volume at 15 percent O<sub>2</sub> and on a dry basis).

F = NO<sub>x</sub> emission allowance for fuel-bound nitrogen defined by the following table:

<u>Fuel-Bound Nitrogen</u> <u>(% by Weight)</u>	<u>F (NO<sub>x</sub> % by Volume)</u>
<u>0 &lt; N &lt; 0.015</u>	<u>0</u>
<u>0.015 &lt; N &lt; 0.03</u>	<u>0.04 (N-0.015)</u>

where: N = the nitrogen content of the fuel (% by weight).

[Rule 62-212.400(6), F.A.C.]

F.9. Carbon Monoxide. Carbon monoxide emissions when firing natural gas shall not exceed 25 ppmvd.  
[Rule 62-212.400(6), F.A.C.]

F.10. Carbon Monoxide. Carbon monoxide emissions when firing No. 2 fuel oil shall not exceed 90 ppmvd.  
[Rule 62-212.400(6), F.A.C.]

**Excess Emissions**

F.11. Excess emissions resulting from startup, shutdown, malfunction or fuel switching shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized but in no case exceed four hours in any 24-hour period for cold startup or two hours in any 24-hour period for other reasons unless specifically authorized by DEP for longer duration.  
[Rule 62-219.700(1), F.A.C.]

F.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 pursuant to Rule 62-210.700, F.A.C.

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

F.13. Excess Emissions Report: If excess emissions occur due to malfunction, the owner or operator shall notify the Permitting Authority within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A.

[Rules 62-4.130 and 62-210.700(6), F.A.C.]

### **Monitoring of Operations**

F.14. Nitrogen Oxides. The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from this source. Thirty day rolling average periods when NO<sub>x</sub> emissions (ppmvd @ 15% oxygen) are above the BACT standards (12/42 ppmvd for gas/oil) shall be reported to the DEP Northwest District Office pursuant to Rule 62-4.160(8), F.A.C. The continuous emission monitoring systems must comply with the certification and quality assurance, and other applicable requirements from 40 CFR 75. Periods of startup, shutdown, malfunction, and fuel switching shall be monitored, recorded, and reported as excess emissions following the format of 40 CFR 60.7 (1997 version). The NO<sub>x</sub> CEMS will be used in lieu of the water/fuel monitoring system which is required in accordance with 40 CFR 60, Subpart GG (1997 version). The calibration of the water/fuel monitoring device required in 40 CFR 60.335 (c)(2) (1997 version) will be replaced by the 40 CFR 75 certification tests of the NO<sub>x</sub> CEMS.

[Rule 62-297.620, F.A.C.]

F.15. Monitoring Schedule - Fuel Oil. The following monitoring schedule for No. 2 fuel oil shall be followed: For all bulk shipments of No. 2 fuel oil received at the Purdom Station, an analysis which reports the sulfur content and fuel bound nitrogen content of the fuel shall be provided by the fuel vendor or other sources which follow the appropriate fuel test methods listed in Specific Condition F.19. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d).

[40 CFR 60.334(b)(2)]

F.16. Custom Monitoring Schedule - Natural Gas. The following custom monitoring schedule for natural gas is approved in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2).

a. Monitoring of natural gas nitrogen content shall not be required.

b. Analysis of the sulfur content of natural gas shall be conducted using one of the EPA-approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. Once Unit 8 becomes operational, monitoring of the sulfur content of the natural gas shall be conducted semiannually.

- c. Should any sulfur analysis indicate noncompliance with 40 CFR 60.333, the permittee shall notify DEP of such excess emissions and the customized fuel monitoring schedule shall be reexamined. The sulfur content of the natural gas will be monitored weekly during the interim period while the monitoring schedule is reexamined.
- d. The permittee shall notify DEP of any change in natural gas supply for reexamination of this monitoring schedule. A substantial change in natural gas quality (i.e., sulfur content variation of greater than 1 grain per 100 cubic foot of natural gas) shall be considered as a change in the natural gas supply. Sulfur content of the natural gas will be monitored weekly by the natural gas supplier during the interim period when this monitoring schedule is being reexamined.
- e. Records of sampling analysis and natural gas supply pertinent to this monitoring schedule shall be retained by the permittee for a period of five years, and shall be made available for inspection by the appropriate regulatory personnel.
- f. The permittee may obtain the sulfur content of the natural gas from the fuel supplier provided the test methods listed in Specific Condition F.19 are used.  
[40 CFR 60.334(b)(2)]

**F.17. Determination of Process Variables:**

- a. The permittee shall operate and maintain equipment and/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. Equipment and/or instruments used to directly or indirectly determine such process variables, including devices such as belt scales, weigh 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**

**F.18. Compliance Testing - General.** Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate, for each fuel, at which this unit will be operated, but not later than 180 days of initial operation of the unit for that fuel, and annually thereafter as indicated in this permit, by using the following reference methods as described in 40 CFR 60, Appendix A (1997 version), and adopted by reference in Chapter 62-297, F.A.C.

Initial (I) compliance tests shall be performed on Unit 8 while firing each fuel (gas, oil). Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 - September 30) pursuant to Rule 62-297.340, F.A.C., on Unit 8 as indicated. The following reference methods shall be used:



- Method 9 Visual Determination of the Opacity of Emissions from Stationary Sources (I, A); annual on oil if greater than 400 hours of oil firing; however, testing on gas is required only once every five years.

- Method 10 Determination of Carbon Monoxide Emissions from Stationary Sources (I, A). Testing may be conducted at less than capacity. Annual compliance testing may be conducted concurrent with the annual RATA testing required pursuant to 40 CFR 75 (gas only).

- Method 20 Determination of Oxides of Nitrogen and diluent emissions from Stationary Gas Turbines (I only, for compliance with 40 CFR 60. Subpart GG)

Determination of Oxides of Nitrogen emissions will be by a Continuous Emissions Monitoring System (CEMS). A CEMS operated and maintained in accordance with 40 CFR 75 may be used. Compliance with the NO<sub>x</sub> emissions standards in Table 1 shall be demonstrated with this CEMS system based on a 30 day rolling average. Based on CEMS data at the end of each operating day, a new 30 day average emission rate is calculated from the arithmetic average of all valid hourly emission rates during the previous 30 operating days (excluding periods of startup, shutdown, malfunction or fuel switching).

Note: No other methods may be used for compliance testing unless prior DEP approval is received in writing. The DEP may request a special compliance test pursuant to Rule 62-297.340(2), F.A.C., when, after investigation (such as complaints, increased visible emissions, or questionable maintenance of control equipment), there is reason to believe that any applicable emission standard is being violated.

[Rule 62-212.400(6)(d), F.A.C. and PSD-FL-239/PA97-36]

F.19. Sulfur Dioxide and PM<sub>10</sub>. Notwithstanding the requirements of Rule 62-297.340, F.A.C., the exclusive use of fuel oil with a maximum sulfur content limit of 0.05% or less, by weight, is the method for determining compliance for SO<sub>2</sub> and PM<sub>10</sub>. For the purposes of demonstrating compliance with 40 CFR 60.333 SO<sub>2</sub> emission limit and the 0.05% S limit, fuel oil analysis using ASTM D2880-71 or D4294 (or equivalent) for the sulfur content of liquid fuels and D1072-80, D3031-81, D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA approved custom fuel monitoring schedule in Condition F.16. However, the permittee is responsible for ensuring that the procedures above are used for determination of fuel sulfur content. Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335 (e) (1997 version). For the purposes of demonstrating compliance with the emissions caps (Facility Wide Conditions 12 and 13), natural gas and fuel oil supplier data for sulfur content may be submitted or the natural gas sulfur content referenced in 40 CFR 75 Appendix D may be utilized.

[Rule 62-212.400(6)(d), F.A.C. and PSD-FL-239/PA97-36]

F.20 Carbon Monoxide. An initial test for CO, concurrent with the initial NO<sub>x</sub> test, is required. The initial NO<sub>x</sub> and CO test results shall be the average of three valid one-hour runs. The DEP's Northwest District office shall be notified, in writing, at least 30 days prior to the initial compliance tests and at least 15 days before annual compliance test(s). Testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 95-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test

(with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 105 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Compliance test results shall be submitted to the DEP's Northwest District office no later than 45 days after completion of the last test run.

[Rule 62-212.400(6)(d), F.A.C. and PSD-FL-239/PA97-36]

F.21. Calculation of Emission Rate. See common conditions C.12.

F.22. Required Stack Sampling Facilities. See common condition C.14.

**Recordkeeping and Reporting Requirements**

F.23. See common conditions C.18. and C.20.

F.24. NSPS Notifications. The following reports shall be provided to the Florida DEP Northwest District Office in accordance with the schedule provided:

a. Notification of the date construction of Unit 8 is commenced postmarked no later than 30 days after such date. [40 CFR 60.7(a)(2)]

b. Notification of the anticipated date of initial startup of Unit 8 postmarked not more than 60 days nor less than 30 days prior to such date. [40 CFR 60.7(a)(3)]

c. Notification of the actual date of initial startup of Unit 8 postmarked within 15 days after such date. [40 CFR 60.7(a)(4)]

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## Section IV. Acid Rain Part.

Operated by: City of Tallahassee  
 ORIS Code: 689

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

The emissions unit listed below is regulated under Acid Rain Part, Phase II.

#### E.U. ID

<u>No.</u>	<u>Description</u>
-007	Boiler Number 7 - 621 MMBtu/hour
-012	Combustion Turbine Unit 8 - 1659.5 MMBtu/hour

A.1. The Phase II Acid Rain Part application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain units must comply with the standard requirements and special provisions set forth in the application listed below:

a. DEP Form No. 62-210.900(1)(a), dated 07/01/95, received December 20, 1995.

b. DEP Form No. 62-210.900(1)(a), Dated 03/04/97, Received March 14, 1997

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

A.2. Sulfur dioxide (SO<sub>2</sub>) allowance allocations and nitrogen oxide (NO<sub>x</sub>) requirements for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	Year	2000	2001	2002
-007	7	SO <sub>2</sub> allowances, under Table 2, 3, or 4 of 40 CFR 73	438*	438*	438*
		NO <sub>x</sub> 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, 3, or 4 of 40 CFR 73.

\*\* If applicable, by January 1, 1999, this Part will be reopened to add NO<sub>x</sub> requirements in accordance with the regulations implementing section 407 of the Clean Air Act.

A.3. Comments, notes, and justifications: None.

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## Appendix E-1, List of Exempt Emissions Units and/or Activities.

City of Tallahassee, Electric Utilities  
Sam O. Purdom Generating Station

PROPOSED Permit No.: 1290001-001-AV  
Facility ID No.: 1290001

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Full 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 whether a facility containing such emissions units or activities would be subject to any applicable requirements. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., are also exempt from the permitting requirements of Chapter 62-213, F.A.C., provided such emissions units and activities also meet the exemption criteria of Rule 62-213.430(6)(b), F.A.C. Pursuant to Rule 62-213.430(6)(a), F.A.C., emissions units or activities which are added to a Title V source after issuance of the Title V permit 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 for exemption from permitting pursuant to rule 62-213.430(6)(b), F.A.C. The below listed emissions units and/or activities are hereby exempt pursuant to Rule 62-213.430(6), F.A.C.

### Brief Description of Emissions Units and/or Activities:

#### Exempt Emissions Related to Combustion Turbine No. 1

1. Oil Vapor Extractor
2. Fuel Oil Piping
3. Lube Oil Tank

#### Exempt Emissions Related to Combustion Turbine No. 2

4. Oil Vapor Extractor
5. Fuel Oil Piping
6. Lube Oil Tank

#### Exempt Emissions Related to Steam Generator No. 5<sup>(1)</sup>

7. Fuel Oil Piping
8. Hydrogen Gas Vents
9. Deareator Tank Vents
10. Oil Vapor Extractors
11. Lube Oil Tank ( storage)
12. Lube/Fuel Oil Drip Pans
13. Noncondensable Gas Extractor
14. On-site Generated Non-hazardous Boiler Chemical Cleaning Wastes

#### Exempt Emissions Related to Steam Generator No. 6<sup>(1)</sup>

15. Fuel Oil Piping
16. Hydrogen Gas Vents
17. Deareator Tank Vents
18. Oil Vapor Extractors
19. Lube Oil Tank (storage)

20. Lube/Fuel Oil Drip Pans
21. Noncondensable Gas Extractor
22. On-site Generated Non-hazardous Boiler Chemical Cleaning Wastes

## Appendix E-1, Continued.

### Exempt Emissions Related to Steam Generator No. 7

23. Fuel Oil Piping
24. Hydrogen Gas Vents
25. Deareator Tank Vents
26. Oil Vapor Extractors
27. Lube Oil Tank ( storage)
28. Lube/Fuel Oil Drip Pans
29. Noncondensable Gas Extractor
30. On-site Generated Non-hazardous Boiler Chemical Cleaning Wastes

### Fuel Farm

31. Fuel Oil Tank No. 1
32. Fuel Oil Tank No. 2<sup>(2)</sup>
33. Waste Water Tank<sup>(2)</sup>
34. Fuel Oil Tank No. 3
35. Waste Oil Tank
36. Distillate Oil Tank
37. Gasoline Tank
38. Diesel Oil Tank
39. (New) Diesel Oil Tank Associated With the Hydrant Main

### Fuel Dispensing Operations

40. Truck Loading/Unloading (for items 29-33)
41. Truck Loading/Unloading for Distillate Oil Tank
42. Truck Loading/Unloading for Gasoline Tank
43. Fuel Dispensing Operations for Diesel Oil Tank
44. Barge Unloading Station
45. Truck Loading/Unloading Rack 1
46. Truck Loading/Unloading Rack 2

### Fugitive VOC Emissions

47. (1-15) Parts Washers - Nonhalogenated Solvents

### Space Heaters

48. (1-7) Space Heaters

### Fugitive PM<sub>10</sub> Emissions

49. Paved Roads
50. Unpaved Roads
51. Heavy Construction Activities
52. Heavy Construction Activities (Unit 8 Project)<sup>(3)</sup>
53. Aggregate Handling & Storage

### Laboratory

54. Laboratory Equipment
55. Chemical Usage
56. Vacuum Pumps
57. Laboratory Fume Hoods



58. Central Vacuum System

Appendix E-1, Continued.

Maintenance Activities

Welding - Exempt per Rule 62-210.300(3)(a)16., F.A.C.

Plant Operations

59. Lube Oil Storage Tanks

60. Propane Storage Tanks

Exempt Emissions Related to the Auxiliary Boiler

62. Deaerator Tank Vents

63. Noncondensable Gas Extractor

Exempt Emissions Related to the Unit 8 Combined Cycle Unit<sup>(3)</sup>

64. Oil Vapor Extractor.

65. Fuel Oil Piping

66. Hydrogen Gas Vents

67. Lube Oil Tanks

68. Deaerator Tank Vents

69. Noncondensable Gas Extractor

70. Lube/Fuel Oil Drip Pans

Notes: <sup>(1)</sup> - Emissions Units will be shut down as part of the Purdom Unit 8 Project

<sup>(2)</sup> - Emissions Unit will be recommissioned as a waste water tank as part of the Purdom Unit 8 Project

<sup>(3)</sup> - New emissions units associated with the Purdom Unit 8 Project.

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

City of Tallahassee, Electric Utilities  
Sam O. Purdom Generating Station

PROPOSED Permit No.: 1290001-001-AV  
Facility ID No.: 1290001

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

### E.U. ID No.

### Brief Description of Emissions Units and/or Activity

-010 Fugitive VOC Sources - Painting Operations  
-xxx General purpose engines  
-yyy Emergency generators

-010 Fugitive VOC Emissions. Fugitive VOC emissions are generated from the painting operations associated with normal plant maintenance— and temporary activities associated with the construction of Unit 8. SCC: 4-90-999-98, Miscellaneous Volatile Organic Compound Evaporation.

-xxx General purpose internal combustion engines.  
Located for use at this source are ~~(2) Welding Generators~~ (2) Welding Generators and a single Fire Pump.

-yyy Emergency generators.  
Located for use at this source are ~~(34)~~ (34) Emergency Generators.

**Appendix H-1, Permit History/ID Number Changes**

City of Tallahassee  
Sam O. Purdom Generating Station

**PROPOSED Permit No.:** 1290001-001-AV  
**Facility ID No.:** 1290001

**Permit History (for tracking purposes):**

E.U.

<u>ID No.</u>	<u>Description</u>	<u>Permit No.</u>	<u>Issue Date</u>	<u>Expiration Date</u>	<u>Extended Date<sup>1,2</sup></u>	<u>Revised Date(s)</u>
-001	Boiler #1	AO65-242828	3/25/94	3/1/99*		
-002	Boiler #2	AO65-242828	3/25/94	3/1/99*		
-003	Boiler #3	AO65-242828	3/25/94	3/1/99*		
-004	Boiler #4	AO65-242828	3/25/94	3/1/99*		
-005	Boiler #5	AO65-242831	3/8/94	3/1/99		
-006	Boiler #6	AO65-242831	3/8/94	3/1/99		
-007	Boiler #7	AO65-242831	3/8/94	3/1/99		
-008	Combustion Turbine #1	AO65-242827	3/8/94	3/1/99	6/10/94, 6/24/94	
-009	Combustion Turbine #2	AO65-242827	3/8/94	3/1/99	6/10/94, 6/24/94	
-011	Auxiliary Boiler	1290001-002-AC	12/5/96	12/31/97		
	BACT		10/8/96			
-012	Combustion Turbine Unit 8	PSD-FL-239/PA96-36	TBD	TBD+5years		

\* Permit surrendered October 2, 1996.

**(if applicable) ID Number Changes (for tracking purposes):**

From: **Facility ID No.:** 10TLH650001

To: **Facility ID No.:** 1290001

Notes:

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

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

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

**Referenced Attachments**

**Phase II Acid Rain Application/Compliance Plan (see Title V Permit)**

**Appendix A-1, Abbreviations, Definitions, Citations, and Identification Numbers**

**Appendix SS-1, Stack Sampling Facilities (version dated 3/25/96)**

**Appendix TV-1, Title V Conditions (version dated 2/5/97)**

**Permit Number 1290001-002-AC**

**BACT Determination Dated October 8, 1996**

**ASP Number 97-B-01**

**Table 1-1, Summary of Air Pollutant Standards and Terms**

**Table 2-1, Summary of Compliance Requirements**

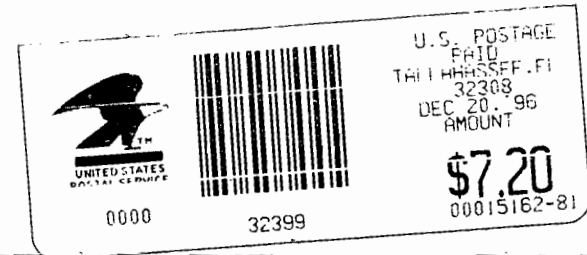
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right of the return address

**CERTIFIED**

P 230 286 848

**MAIL**

Environmental Affairs Division  
Utility Support Services, 3rd floor  
300 South Adams Street  
Tallahassee, FL 32301



Mr. John Brown, Jr., P.E.  
Dept. Env. Protection  
Air Permitting/Standards  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

FIRST CLASS  
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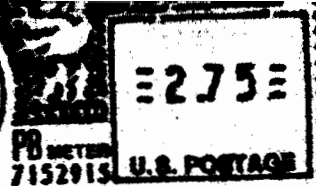
CITY OF TALLAHASSEE

CITY HALL  
TALLAHASSEE, FLORIDA 32301

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P 230 501 180

MAIL



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RETURN RECEIPT REQUESTED

John C. Brown, P.E.  
FL Dept. of Environmental  
2600 Blair Stone Road  
Mail Stop 5500  
Tallahassee, FL 32399-2400