Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

July 23, 1997

Mr. Robert E. McGarrah
Production Superintendent
City of Tallahassee, Electric Utilities
2602 Jackson Bluff Road
Tallahassee, Florida 32304

Re: PROPOSED Title V Permit No.: 0730003-001-AV
Arvah B. Hopkins Generating Station

Dear Mr. McGarrah:

One copy of the "PROPOSED PERMIT DETERMINATION" for the Arvah B. Hopkins Generating Station located at Route 4, Box 450, Geddie Road, Tallahassee, Leon County, is enclosed. This letter is only a courtesy to inform you that the DRAFT permit has become a PROPOSED permit.

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

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permit will not be issued until the permitting authority receives written notice that the objection is resolved or withdrawn.

If you should have any questions, please contact Jonathan Holtom at 850/488-1344.

Sincerely,

C. H. Fancy, P.E.
Chief
Bureau of Air Regulation

CHF/h
Enclosure

copies furnished to:
Mr. Karl Bauer, P.E., City of Tallahassee (without enclosures)
Ms. Jennette Curtis, City of Tallahassee (without enclosures)
Mr. Darrell Graziani, P.E., Foster-Wheeler (without enclosures)
Mr. Ed Middleswart, DEP, Northwest District Office (without enclosures)
Mr. Gerry Neubauer, DEP, Northwest District Branch Office (without enclosures)
Ms. Carla E. Pierce, USEPA, Region 4 (INTERNET E-mail Memorandum)
Ms. Yolanda Adams, USEPA, Region 4 (INTERNET E-mail Memorandum)

PROPOSED PERMIT DETERMINATION

PROPOSED Permit No.: 0730003-001-AV

I. Public Notice.

An "INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" to City of Tallahassee, Electric Utilities for the Arvah B. Hopkins Generating Station, located at Route 4, Box 450, Geddie Road, Tallahassee, Leon County, was clerked on May 23, 1997. The "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was published in the Tallahassee Democrat on June 9, 1997. The DRAFT Title V Air Operation Permit was available for public inspection at the Northwest District office in Pensacola and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE TITLE V AIR OPERATION PERMIT" was received on June 12, 1997.

II. Public Comment(s).

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

A. Letter from Mr. Robert E. McGarrah dated June 18, 1997, and received on June 18, 1997.

General Comments

1. Comment:

In regards to the Department's use of "Not Federally Enforceable" to identify State-only requirements, our review has identified several additional permit conditions (Emission Unit-Specific Conditions A.1, A.2, A.3, A.23, A.24, B.1, B.2, B.3, B.28, B.29, C.1, C.2, C.3, C.9, C.12 and C.13) which should be listed in this manner.

Response:

These conditions have been researched and all current conditions that have not been flagged are either part of the State Implementation Plan (SIP) or a federally delegated program, such as Title V. The above referenced conditions will remain as noticed in the DRAFT.

2. Comment:

The heat input limit of 2,500 MMBtu/hr, applicable to 100 percent natural gas firing, should be added to references regarding Boiler No. 2. (Section I. Subpart B, Section III. B. I, Section IV. Subsection A, Table 1-1, and Table 2-1). The City would like to point out that Boiler No. 2 has never undergone physical or operational changes and that the Unit has always been operated with the understanding that the maximum heat input on natural gas at full capacity is 2,500 MMBtu/hr.

Response:

Due to the submittal (signed by the R.O., signed and sealed by the P.E.) received on July 7, 1997, stating that no physical changes have occurred since the installation of this boiler which would allow an increase in heat

input, but rather, this being the design heat input rate while firing natural gas, the requested changes will be made.

As a result of this comment, the following changes have been made:

1) **Section 1., Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).** is changed:

From:
Regulated Emissions Units:

E.U. ID No.	Brief Description
-001	Boiler Number 1 - 903 MMBtu/hour (Phase II Acid Rain Unit)
-002	Combustion Turbine Number 1 - 228 MMBtu/hour Peaking Unit
-003	Combustion Turbine Number 2 - 446 MMBtu/hour Peaking Unit
-004	Boiler Number 2 - 2,325 MMBtu/hour (Phase II Acid Rain Unit)

To:
Regulated Emissions Units:

E.U. ID No.	Brief Description
-001	Boiler Number 1: 903 MMBtu/hour (Phase II Acid Rain Unit)
-002	Combustion Turbine Number 1: 228 MMBtu/hour Peaking Unit
-003	Combustion Turbine Number 2: 446 MMBtu/hour Peaking Unit
-004	Boiler Number 2: 2,325 - 2,500 MMBtu/hour (Phase II Acid Rain Unit)

2) **Section III, Subsection B. Emissions Unit Description** is changed:

From:
Emissions unit number 004 is a Babcox & Wilcox steam generator (model number RB-533) designated as "Boiler Number 2". It is rated at a maximum heat input of 2,325 million Btu per hour (MMBtu/hour) when firing natural gas or fuel oil and a nominal 238 MW and 1,619,000 pounds of steam per hour.

To:
Emissions unit number 004 is a Babcox & Wilcox steam generator (model number RB-533) designated as "Boiler Number 2". It is rated at a maximum heat input of 2,325 million Btu per hour (MMBtu/hour) when firing fuel oil and 2,500 MMBtu/hour when firing natural gas and a nominal 238 MW and 1,619,000 pounds of steam per hour.

3) **Condition Number B.1.** is changed:

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

Unit No.	MMBtu/hr Heat Input	Fuel Type
-004	2,325	Natural Gas
	2,325	No. 2 - No. 6 Fuel Oil

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

To:

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

Unit No.	MMBtu/hr Heat Input	Fuel Type
-004	2,500	Natural Gas
	2,325	No. 2 - No. 6 Fuel Oil

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

[Rules 62-4.160(2), 62-210.200(PTE) & 62-296.405, F.A.C.; and, Applicant request dated June 18, 1997.]

4) **Section IV., Subsection A.** is changed:

From:

The emissions units listed below are regulated under Acid Rain, Phase II.

E.U. ID No.	Description
-001	Boiler Number 1 - 903 MMBtu/hour
-004	Boiler Number 2 - 2325 MMBtu/hour

To:

The emissions units listed below are regulated under Acid Rain, Phase II.

E.U. ID No.	Description
-001	Boiler Number 1: 903 MMBtu/hour
-004	Boiler Number 2: 2,325 - 2,500 MMBtu/hour

5) **Table 1-1, Summary of Air Pollutant Standards and Terms** is changed:

From:

Boiler #2	VE	No. 2 - No. 6 F.O.	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	B.5. & B.6.
(2,325 MMBtu/hour)		Natural Gas	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	B.5. & B.6.
Acid Rain Phase II Unit	PM	No. 2 - No. 6 F.O.	8760	0.1 lb/MMBtu	N/A	N/A	232.5	1,018.4	62-296.405(1)(b)	B.7.
		Natural Gas	8760	0.1 lb/MMBtu	N/A	N/A	232.5	1,018.4	62-296.405(1)(b)	B.7.
	PM-SB **	No. 2 - No. 6 F.O.	3 hr/day	0.3 lb/MMBtu	N/A	N/A	697.5	1,272.9	62-200.700(3)	B.8.
		Natural Gas	3 hr/day	0.3 lb/MMBtu	N/A	N/A	697.5	1,272.9	62-200.700(3)	B.8.
(238 MW Turbine-generator)	SO_2	No. 2 - No. 6 F.O.	8760	1.4 lb/MMBtu	N/A	N/A	3,255.0	14,256.9	62-296.405(1)(c)1.h.	B.10.
		Natural Gas	8760	N/A	N/A	N/A	N/A	N/A	62-296.405(1)(c)	B.10.

To:

Boiler #2	VE	No. 2 - No. 6 F.O.	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	B.5. & B.6.
(2,325 MMBtu/hour - Oil)		Natural Gas	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	B.5. & B.6.
(2,500 MMBtu/hour - Gas)	PM	No. 2 - No. 6 F.O.	8760	0.1 lb/MMBtu	N/A	N/A	232.5	1,018.4	62-296.405(1)(b)	B.7.
		Natural Gas	8760	0.1 lb/MMBtu	N/A	N/A	250.0	1,095.0	62-296.405(1)(b)	B.7.
	PM-SB	No. 2 - No. 6 F.O.	3 hr/day	0.3 lb/MMBtu	N/A	N/A	697.5	1,272.9	62-200.700(3)	B.8.
Acid Rain Phase II Unit	**	Natural Gas	3 hr/day	0.3 lb/MMBtu	N/A	N/A	750.0	1,368.8	62-200.700(3)	B.8.
(238 MW Turbine-generator)	SO_2	No. 2 - No. 6 F.O.	8760	1.4 lb/MMBtu	N/A	N/A	3,255.0	14,256.9	62-296.405(1)(c)1.h.	B.10.
		Natural Gas	8760	N/A	N/A	N/A	N/A	N/A	62-296.405(1)(c)	B.10.

6) **Table 2-1, Summary of Compliance Requirements** is changed:

From:

-004	Boiler #2	VE	No. 2 - No. 6 F.O.	DEP method 9	Annually	7/1 - 9/30	60 Minutes
	-2,325 MMBtu/hour		Natural Gas	DEP method 9	N/A	7/1 - 9/30	60 Minutes
	-Acid Rain Phase II Unit	PM	No. 2 - No. 6 F.O.	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	60 Minutes
	-238 MW generator		Natural Gas	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	60 Minutes
		SO_2	No. 2 - No. 6 F.O.	Fuel sampling & analysis per Acid Rain Phase II commitment			
		NOx	No. 2 - No. 6 F.O	30 day rolling avg.	Continuous	N/A	N/A
			Natural Gas	30 day rolling avg.	Continuous	N/A	N/A

To:

-004	Boiler #2	VE	No. 2 - No. 6 F.O.	DEP method 9	Annually	7/1 - 9/30	60 Minutes
	-2,325 MMBtu/hour - Oil		Natural Gas	DEP method 9	N/A	7/1 - 9/30	60 Minutes
	-2,500 MMBtu/hour - Gas	PM	No. 2 - No. 6 F.O.	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	60 Minutes
	-Acid Rain Phase II Unit		Natural Gas	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	60 Minutes
	-238 MW generator	SO_2	No. 2 - No. 6 F.O.	Fuel sampling & analysis per Acid Rain Phase II commitment			
		NOx	No. 2 - No. 6 F.O	30 day rolling avg.	Continuous	N/A	N/A
			Natural Gas	30 day rolling avg.	Continuous	N/A	N/A

Section I. Facility Information, Subsection A. Facility, Description.

3. Comment:

In the clarification of enforceability regarding Permitting Notes please delete the term 'Federally Enforceable' and replace with the term 'enforceable."

Response:

The change to this permitting note will be consistent with prior permitting actions (i.e. City of Tallahassee Purdom Generating Station).

As a result of this comment, the third paragraph in Section I., Subsection A., is changed:

From:
The use of 'Permitting Notes' throughout this permit are for informational purposes only. They are not to be considered as 'Federally Enforceable' conditions.

To:
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)

4. Comment:

The City has revised/added to the Emissions Unit Inventory included in the Permit Application (see attached HGS-06). As such, the City requests that FDEP make a corresponding revision to include the following unregulated emissions units and/or activities:

-005 Fugitive VOC Sources - Painting Operations
-xxx General Purpose Engines
-yyy Emergency Generators

Response:

The requested revisions/additions will be made, however, the actual emissions unit numbers are not yet determined.

As a result of this comment, **Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s)** is changed:

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

E.U. ID No.	Brief Description
-xxx	Fugitive VOC Sources - Painting Operations

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

E.U. ID No.	Brief Description
-xxx	Fugitive VOC Sources - Painting Operations
-yyy	General Purpose Engines
-zzz	Emergency Generators

5. Comment:

For the combustion turbines, please remove the term "Peaking Unit" and replace it with "(LHV)" to more accurately reflect the firing rate which is based on the lower heating value of the fuel. The "(LHV)" designation should also be applied to the maximum heat input rate for the combustion turbines in the Subsection D description and Condition D.1.

Response:

Even though the term "peaking units" is contained in the emission unit descriptions of your current operating permits and in the Title V operating permit application, we will agree to drop it from the emissions unit descriptions in the Title V operating permit.

As a result of this comment, the **Brief Descriptions** are changed:

From:
Regulated Emissions Units:

E.U. ID No.	Brief Description
-001	Boiler Number 1 - 903 MMBtu/hour (Phase II Acid Rain Unit)
-002	Combustion Turbine Number 1 - 228 MMBtu/hour Peaking Unit
-003	Combustion Turbine Number 2 - 446 MMBtu/hour Peaking Unit
-004	Boiler Number 2 - 2,325 MMBtu/hour (Phase II Acid Rain Unit)

To:
Regulated Emissions Units:

E.U. ID No.	Brief Description
-001	Boiler Number 1, 903 MMBtu/hour (Phase II Acid Rain Unit)
-002	Combustion Turbine Number 1, 228 MMBtu/hour
-003	Combustion Turbine Number 2, 446 MMBtu/hour
-004	Boiler Number 2, 2,325 - 2,500 MMBtu/hour (Phase II Acid Rain Unit)

Also as a result of this comment, the **Subsection C. - Facility Description** and **Condition Number C.1.** (not D.1.) is changed:

From:
Subsection C. This section addresses the following emissions units.

E.U. ID No.	Brief Description
-002	Combustion Turbine Number 1
-003	Combustion Turbine Number 2

Emissions unit number 002 is a combustion turbine manufactured by Westinghouse (model number W191G) and is designated as "Combustion Turbine Number 1". It is 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 with a maximum sulfur content of 0.4%, by weight. Emissions unit number 003 is a combustion turbine manufactured by Westinghouse (model number W251G) and is designated as "Combustion Turbine Number 2". It is rated at a maximum heat input of 446 million Btu per hour (MMBtu/hour) while being fueled by natural gas and/or No. 2 fuel oil with a maximum sulfur content of 0.4%, by weight. These combustion turbines are used as peaking units during peak demand times, during emergencies, and during controls testing. Combustion Turbine Number 1 runs a nominal 16.47 MW generator and Combustion Turbine Number 2 runs a nominal 26.8 MW generator. Emissions from the combustion turbines are uncontrolled.

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

Unit No.	MMBtu/hr Heat Input	Fuel Type
-002	228	Natural Gas
(CT #1)	228	No. 2 Fuel Oil
-003	446	Natural Gas
(CT #2)	446	No. 2 Fuel Oil

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

To:
Subsection C. This section addresses the following emissions units.

E.U. ID No.	Brief Description
-002	Combustion Turbine Number 1
-003	Combustion Turbine Number 2

Emissions unit number 002 is a combustion turbine manufactured by Westinghouse (model number W191G) and is designated as "Combustion Turbine Number 1". It is 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 with a maximum sulfur content of 0.4%, by weight. Emissions unit number 003 is a combustion turbine manufactured by Westinghouse (model number W251G) and is designated as "Combustion Turbine Number 2". It is rated at a maximum heat input of 446 million Btu per hour (MMBtu/hour) while being fueled by natural gas and/or No. 2 fuel oil with a maximum sulfur content of 0.4%, by weight. Combustion Turbine Number 1 runs a nominal 16.47 MW generator and Combustion Turbine Number 2 runs a nominal 26.8 MW generator. Emissions from the combustion turbines are uncontrolled.

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

Unit No.	MMBtu/hr Heat Input	Fuel Type
-002(CT #1)	228 (LHV @ 80 degrees Fahrenheit)	Natural Gas
	228 (LHV @ 80 degrees Fahrenheit)	No. 2 Fuel Oil
-003 (CT #2)	446 (LHV @ 80 degrees Fahrenheit)	Natural Gas
	446 (LHV @ 80 degrees Fahrenheit)	No. 2 Fuel Oil

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

Section II. Facility-wide Conditions

6. Comment:

Condition No. 8 relates to reasonable precautions to prevent emissions of unconfined particulate matter. Please eliminate condition 8.c. and revise condition 8.d. by deleting the second sentence beginning with "Additionally, water shall be...". A revised Attachment PGS-04 reflecting the requested changes are attached.

Response:

The requested changes to Condition No. 8. will be made.

As a result of this comment, **Condition No. 8.** is changed:

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

a) Concrete mixing in the portable concrete mixer shall be operated on an as-needed basis. Reasonable precautions include enclosing the activity wherever practical.

b) Abrasive blasting activities that are associated with normal maintenance and corrosion control activities shall be enclosed wherever practical.

c) The aggregate storage piles that occur on a temporary basis in association with miscellaneous construction activities shall have water applied on an as-needed basis to control unconfined emissions from the handling and storage of these materials and the related construction activities.

d) Unconfined emissions associated with the limited on-site traffic shall be controlled by limiting vehicle speeds and unnecessary traffic within the plant grounds. Additionally, water shall be applied by the use of hoses (manual operation), as needed.

[Rule 62-296.320(4)(c)2., F.A.C., Proposed by applicant in initial Title V permit application received June 14, 1996]

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

a) Concrete mixing in the portable concrete mixer shall be operated on an as-needed basis. Reasonable precautions include enclosing the activity wherever 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.

[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.]

Section III. Emissions Unit(s)
General

7. Comment:

Please revise the permit to clarify that Boilers Number 1 and 2 may burn on-specification used oil generated by the City, as requested in the application. (Descriptions for Subsections A and B, Conditions A.1, A.3, B.1, B.3, and Table 1-1).

Response:

The Department agrees to allow on-specification used oil, which is generated by the City of Tallahassee, to be combusted in these Boilers.

As a result of this comment, **Condition Numbers A.1., A.3., B.1. & B.3. are** changed:

From:

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

Unit No.	MMBtu/hr Heat Input	Fuel Type
-001	903	Natural Gas
	903	No. 2 - No. 6 Fuel Oil

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

A.3. Methods of Operation - Fuels. The only fuels allowed to be burned in this boiler are natural gas and/or new No. 2 thru No. 6 fuel oil.
[Rule 62-213.410, F.A.C.]

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

Unit No.	MMBtu/hr Heat Input	Fuel Type
-004	2,325	Natural Gas
	2,325	No. 2 - No. 6 Fuel Oil

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

B.3. Methods of Operation - Fuels. The only fuels allowed to be burned in this boiler are natural gas and/or new No. 2 thru No. 6 fuel oil.
[Rule 62-213.410, F.A.C.]

To:

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

Unit No.	MMBtu/hr Heat Input	Fuel Type
-001	903	Natural Gas
	903	No. 2 - No. 6 Fuel Oil; On-Specification Used Oil

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

A.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 **A.35.**)
[Rule 62-213.410, F.A.C.; and, Applicant's request in initial Title V permit application dated June 14, 1996.]

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

Unit No.	MMBtu/hr Heat Input	Fuel Type
-004	2,500	Natural Gas
	2,325	No. 2 - No. 6 Fuel Oil; On-Specification Used Oil

[Rules 62-4.160(2), 62-210.200(PTE) and 62-296.405, 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.40.**)
[Rule 62-213.410, F.A.C.; and, Applicant's request in initial Title V permit application dated June 14, 1996.]

In addition, as a result of this comment, a new condition will be added to the end of sections A. & B. under the heading of **Miscellaneous Conditions**.

Add (New Conditions):

A.35./B.40. Used Oil. Burning of on-specification used oil is allowed in 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, 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:

(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.

[40 CFR 279.61 and 761.20(e)]

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.]

8. Comment:

The City is revising the Permit Application to include burning of non-hazardous boiler chemical cleaning wastes in Boilers Number 1 and 2 (see attached) and request that FDEP provide corresponding changes to the Permit. (Conditions A.3, B.3, and Table 1-1). Please note, there will be no emissions increase related to this revision.

Response:

Due to the relatively insignificant impact on emissions and the infrequent nature of this activity, we feel that the evaporation of boiler chemical cleaning wastes is most appropriately addressed in Appendix E-1, List of Exempt Emissions Units and/or Activities.

As a result of this revision request, **Appendix E-1, List of Exempt Emissions Units and/or Activities** is changed:

From:

Exempt Emissions Related to Steam Generator No. 1

1. Deareator Tank Vents
2. Air Ejectors
3. Oil Vapor Extractors
4. Noncondensable Gas Extractors
5. Seal Oil Vacuum Pumps
6. Lube Oil Tanks (storage)
7. Lube/Fuel Oil Drip Pans
8. Hydrogen Gas Vents
9. Fuel Oil Piping

Exempt Emissions Related to Steam Generator No. 2

10. Deareator Tank Vents
11. Air Ejectors
12. Oil Vapor Extractors
13. Noncondensable Gas Extractors
14. Seal Oil Vacuum Pumps
15. Lube Oil Tanks (storage)
16. Lube/Fuel Oil Drip Pans
17. Hydrogen Gas Vents
18. Fuel Oil Piping

To:

Exempt Emissions Related to Steam Generator No. 1

1. Deareator Tank Vents
2. Air Ejectors
3. Oil Vapor Extractors
4. Noncondensable Gas Extractors
5. Seal Oil Vacuum Pumps
6. Lube Oil Tanks (storage)

7. Lube/Fuel Oil Drip Pans
8. Hydrogen Gas Vents
9. Fuel Oil Piping
10. City of Tallahassee Electric Utility Generated Non-hazardous Boiler Chemical Cleaning Wastes

Exempt Emissions Related to Steam Generator No. 2

10. Deareator Tank Vents
11. Air Ejectors
12. Oil Vapor Extractors
13. Noncondensable Gas Extractors
14. Seal Oil Vacuum Pumps
15. Lube Oil Tanks (storage)
16. Lube/Fuel Oil Drip Pans
17. Hydrogen Gas Vents
18. Fuel Oil Piping
19. City of Tallahassee Electric Utility Generated Non-hazardous Boiler Chemical Cleaning Wastes (Remainder renumbered accordingly)

9. Comment:

Conditions A.4 and B.4 relate to the allowable hours of operation of the boilers. Please delete the second sentence of the conditions which requires an operations log since the unit is allowed to operate continuously.

Response:

For compliance determination and test applicability purposes, an operations log is required. An accurate record of the hours of operation of the equipment and the actual hours operated on each of the allowed fuels must be kept. The referenced sentence of **Conditions A.4. & B.4.** will not be deleted, but will be changed for clarity.

As a result of this comment, **Condition Number A.4.** is changed:

From:

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 certifying the total hours of operation.
[Rule 62-210.200(PTE), F.A.C.; and, applicant request in initial Title V application received June 14, 1996.]

To:

A.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, AO37-242825, Specific Condition #3.; and, applicant request in initial Title V application received June 14, 1996.]

Also as a result of this comment, **Condition Number B.4.** is changed:

From:

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, applicant request in initial Title V application received June 14, 1996.]

To:

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, applicant request in initial Title V application received June 14, 1996.]

10. Comment:

Conditions A.10 and B.10 relate to the requested sulfur dioxide limit on Boilers Number 1 (and Number 2). The City requests that this (these) condition(s) be made federally enforceable through the Title V permit.

Response:

These limits can be made federally enforceable through the Title V permit, but the SIP limits must also remain in the permit since it is an applicable requirement. Be cautioned that the ability to use these lower limits for any future SIP related purpose is currently unknown.

As a result of this comment, **Condition Numbers A.10. and B.10.** are changed:

From:

A.10. Not federally Enforceable. Sulfur Dioxide. Sulfur dioxide emissions shall not exceed 0.75 pounds per million Btu heat input, as measured by applicable compliance methods. Any calculations used to demonstrate compliance shall be based solely on the heating value, quantities, and the percent sulfur of the liquid and gaseous fuels being burned.
[Rule 62-204.220 & .240, F.A.C.; AO37-242825 specific condition 4 and Applicant's request in initial Title V permit application received June 14, 1996.]

B.10. Not federally enforceable. Sulfur Dioxide. Sulfur dioxide emissions shall not exceed 1.4 pounds per million Btu heat input, as measured by applicable compliance methods. Any calculations used to demonstrate compliance shall be based solely on the heating value, quantities, and the percent sulfur of the liquid and gaseous fuels being burned.
[Rules 62-204.220 & .240, F.A.C.; and, FEPPSA Permit Number PA 74-03D and Applicant's request in initial Title V permit application received June 14, 1996.]

To:

A.10. Sulfur Dioxide. For compliance purposes, the following limit supersedes the limit contained in **Specific Condition A.9.** Sulfur dioxide emissions shall not exceed 0.75 pound per million Btu heat input, as measured by applicable compliance methods. Any calculations used to demonstrate compliance shall be based solely on the heating value, quantities, and the percent sulfur of the liquid and gaseous fuels being burned. (See specific conditions **A.11. & A.21.**)
[Rule 62-204.220 & .240, F.A.C.; AO37-242825 specific condition 4 and Applicant's request in initial Title V permit application received June 14, 1996.]

B.10. Sulfur Dioxide. For compliance purposes, the following limit supersedes the limit contained in **Specific Condition B.9.** Sulfur dioxide emissions shall not exceed 1.4 pounds per million Btu heat input, as measured by applicable compliance methods. Any calculations used to demonstrate compliance shall be based solely on the heating value, quantities, and the percent sulfur of the liquid and gaseous fuels being burned. (See specific conditions **B.11. & B.23.**)
[Rule 62-204.220 & .240, F.A.C.; AO37-242825 specific condition 4 and Applicant's request in initial Title V permit application received June 14, 1996.]

11. Comment:

Conditions A.11, A.21, B.11, and B.26 relate to sampling and analysis of fuel oil for purposes of determining allowable blend. As written, the Permit would potentially prevent the City from firing oil for up to 30 days while awaiting receipt of analysis. This is more restrictive then necessary, especially with the fact that oil deliveries are often received while the City is burning oil in these units. Thus, the City requests that FDEP modify the language to require calculating the maximum allowable blend based on the vendor's or permittee's sulfur content data if greater then the sulfur percent of the existing on-site fuel oil, established by previous analysis, until such time that more accurate analysis is available. This language is a sufficiently conservative approach to calculating the maximum allowable blend and provides reasonable assurance that the sulfur dioxide limit will be achieved while awaiting analysis.

Chapter 40 CFR 75, Appendix D, Section 2.2.6 requires density analysis when the fuel oil flow meter records volumetric flow. Because the City records mass flow, there is no need for density analysis. Thus, the City requests FDEP delete the requirement for density analysis for fuel oil.

Also, the City requests that FDEP modify language to allow use of the 0.0006 lb/MMBtu sulfur dioxide emission factor default value as established in the *Compilation of Air Pollutant Emission Factors* (AP-42) and 40 CFR 75, Appendix D.

Response:

Until such time that the results of a new sample are available for calculation purposes, if the vendor's delivery receipt indicates that the delivered fuel contains a higher sulfur content than that established by the most recent sample of the blended as-fired fuel, we agree to allow continued firing of fuel oil at a newly calculated maximum blend, basing the calculation on the assumption that any future fuel combusted contains the higher sulfur content.

As long as the City is able to accurately maintain a record of the total mass of fuel combusted, the density analysis is not necessary. The specific conditions will be modified to allow for this option.

The City has indicated that the current average sulfur content of the as-delivered natural gas is 0.3 grains/100 cu. ft., with recent documented spikes of up to 0.8 grains/100 cu. ft. The City has also reported that the vendor's guarantee is to deliver natural gas with less than 10 grains/100 cu. ft. To approve calculations based on a default value of 0.0006 lb SO_2/MMBtu (approximately 0.2 grains/100 cubic feet) for natural gas could potentially allow you to violate your sulfur dioxide emission limit. If you choose to use a default value for the sulfur calculations relating to natural gas, the Department will accept a default value equivalent to the highest sulfur content that you could receive, i.e. 10 grains/100 cubic feet. In addition, the analytical methods will be added to A.21. & B.23. for density and caloric value sampling.

As a result of this comment, **Condition Numbers A.11., A.21., B.11. & B.26** are changed:

From:

A.11. Fuel Sulfur. Fuel sulfur content (percent by weight) shall be determined by a fuel analysis representative of "as-fired" fuel. The results of the fuel analysis shall be received in order to calculate a maximum allowable blend of natural gas and fuel oil, prior to burning any fuel oil in the boiler. This prior calculation is required in order to ensure that the allowable SO_2 limit is not exceeded. (See specific conditions **A.10. and A.21.** of this permit.) Upon subsequent fuel oil deliveries, if the vendor's delivery receipt indicates that the sulfur content of the delivered fuel is greater than the sulfur percent established by the previous analysis, a new analysis shall be conducted after the newly delivered fuel has been sufficiently blended with the existing fuel. The results of this

analysis shall be used to calculate a new maximum allowable blend of natural gas and fuel oil prior to burning any of the newly delivered fuel. If the vendor's delivery receipt indicates that the sulfur content of the delivered fuel is less than the sulfur percent previously established, a new analysis is only necessary if the permittee wishes to adjust the previously established blend of natural gas and fuel oil.
[Rules 62-4.070(3) and 62-296.405(1)(c)3., F.A.C.]

A.21. The following fuel sampling and analysis protocol shall be used as an alternate sampling procedure authorized by permit to demonstrate compliance with the sulfur dioxide standard:

a. Determine and record the as-fired fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91 to analyze a representative sample of the blended fuel following each fuel delivery.
b. Establish and maintain a record of the sulfur content of the "as-fired" natural gas.
c. Record daily the amount of each fuel fired, the density of each fuel, the heating value, and the percent sulfur content by weight of each fuel.
d. Utilize the information in a., b. and c., above, to calculate the SO_2 emission rate to ensure compliance at all times.

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

B.11. Fuel Sulfur. Fuel sulfur content (percent by weight) shall be determined by a fuel analysis representative of "as-fired" fuel. The results of the fuel analysis shall be received in order to calculate a maximum allowable blend of natural gas and fuel oil prior to burning any fuel oil in the boiler. This prior calculation is required in order to ensure that the allowable SO_2 limit is not exceeded. (See specific conditions **B.10. and B.26.** of this permit.) Upon subsequent fuel oil deliveries, if the vendor's delivery receipt indicates that the sulfur content of the delivered fuel is greater than the sulfur percent established by the previous analysis, a new analysis shall be conducted after the newly delivered fuel has been sufficiently blended with the existing fuel. The results of this analysis shall be used to calculate a new maximum allowable blend of natural gas and fuel oil prior to burning any of the newly delivered fuel. If the vendor's delivery receipt indicates that the sulfur content of the delivered fuel is less than the sulfur percent previously established, a new analysis is only necessary if the permittee wishes to adjust the previously established blend of natural gas and fuel oil.
[Rules 62-4.070(3) and 62-296.405(1)(c)3., F.A.C.]

B.26. The following fuel sampling and analysis protocol shall be used as an alternate sampling procedure authorized by permit to demonstrate compliance with the sulfur dioxide standard:

a. Determine and record the as-fired fuel sulfur content, percent by weight, for liquid fuels using either ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91 to analyze a representative sample of the blended fuel following each fuel delivery.
b. Establish and maintain a record of the sulfur content of the "as-fired" natural gas.
c. Record daily the amount of each fuel fired, the density of each fuel, the heating value, and the percent sulfur content by weight of each fuel.
d. Utilize the information in a., b. and c., above, to calculate the SO_2 emission rate to ensure compliance at all times.

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

To:

A.11. Fuel Sulfur. Fuel sulfur content (percent, by weight) shall be determined by a fuel analysis representative of all "as-fired" fuels. Prior to burning any fuels in the boiler pursuant to this permit, receipts of the analyses of the existing fuels shall have been received by the City in order to use their values and calculate a maximum allowable fuel blend of natural gas and fuel oil. Upon subsequent fuel deliveries, if the vendor's delivery receipts indicate that the sulfur content of the delivered fuel is greater than the sulfur content established by the previous analysis, then a new maximum allowable fuel blend shall be calculated using the assumption that any future fuel fired contains the higher sulfur content. The resulting maximum allowable fuel blend shall be

adhered to until such time that a more accurate analysis has been provided. If the vendor's delivery receipt indicates that the sulfur content of the delivered fuel is less than the sulfur content previously established, a new analysis is only necessary if the permittee wishes to adjust the previously established maximum allowable fuel blend. (See specific conditions **A.10. and A.21.**)
[Rules 62-4.070(3) & 62-296.405(1)(c)3., F.A.C.; and, Applicant Request dated June 18, 1997.]

A.21. The following fuel sampling and analysis protocol shall be used as an alternate sampling procedure authorized by permit to demonstrate compliance with the sulfur dioxide standard and to provide the necessary values needed to calculate a maximum allowable fuel blend:

a. Establish and maintain a record of the sulfur content (percent, by weight) of the "as-fired" fuel oil using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or equivalent, to analyze a representative sample of the blended fuel following each fuel delivery. This record may be maintained either by;
   1) retaining the delivery receipts that are provided by the fuel oil vendor (which indicates that the proper ASTM test methods have been followed) each time a fuel oil delivery is received, or;
   2) by "as-fired" sample results provided by the permittee.
b. Establish and maintain a record of the sulfur content of the "as-fired" natural gas using either ASTM D1072-90(94)E-1, ASTM D3031-81(86), ASTM D3246-92, ASTM D4084-94, or equivalent. This record may be maintained either by;
   1) retaining delivery receipts provided by the natural gas vendor (which indicates that the proper ASTM test methods have been followed and which shall be provided, at a minimum, each time there is a measurable increase in the sulfur content of the natural gas), or;
   2) by on-site sample results provided by the permittee, or;
   3) by utilizing the FERC Tariff guaranteed maximum sulfur content of 10 grains per 100 cubic feet of natural gas as a "default value".
c. Establish and maintain a record of either the density (using ASTM D 1298-80, or equivalent), or the mass, and the calorific heat value in Btu per pound (using ASTM D 240-76, or equivalent), of the fuel oil combusted. This record may be maintained either by;
   1) retaining the delivery receipts that are provided by the fuel oil vendor (which indicates that the proper ASTM test methods have been followed) each time a fuel oil delivery is received, or;
   2) by on-site sample results provided by the permittee, or;
   3) by utilizing data provided by a certified continuous mass flow monitor in accordance with 40 CFR 75, Appendix D.
d. Record daily the amount of each fuel fired, the sulfur content (percent, by weight) of each fuel, either the density or mass of the fuel oil, and the calorific heat value of each fuel. For all fuels fired, the highest value for any parameter (i.e., density, calorific heat value, etc.) that has been established by the vendor's receipt shall be utilized until an as-fired fuel analysis is received to establish a new value for the parameter in question.
e. Utilize the information in a., b. c. and d., above, to calculate the SO_2 emission rate to ensure compliance at all times.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. & 62-297.440, F.A.C.; and, Applicant Request dated July 10, 1997]

B.11. Fuel Sulfur. Fuel sulfur content (percent, by weight) shall be determined by a fuel analysis representative of all "as-fired" fuels. Prior to burning any fuels in the boiler pursuant to this permit, receipts of the analyses of the existing fuels shall have been received by the City in order to use their values and calculate a maximum allowable fuel blend of natural gas and fuel oil. Upon subsequent fuel deliveries, if the vendor's delivery receipts indicate that the sulfur content of the delivered fuel is greater than the sulfur content established by the previous analysis, then a new maximum allowable fuel blend shall be calculated using the assumption that any future fuel fired contains the higher sulfur content. The resulting maximum allowable fuel blend shall be adhered to until such time that a more accurate analysis has been provided. If the vendor's delivery receipt

indicates that the sulfur content of the delivered fuel is less than the sulfur content previously established, a new analysis is only necessary if the permittee wishes to adjust the previously established maximum allowable fuel blend. (See specific conditions **B.10. and B.23.**)
[Rules 62-4.070(3) & 62-296.405(1)(c)3., F.A.C.; and, Applicant Request dated June 18, 1997.]

B.23. The following fuel sampling and analysis protocol shall be used as an alternate sampling procedure authorized by permit to demonstrate compliance with the sulfur dioxide standard and to provide the necessary values needed to calculate a maximum allowable fuel blend:

a. Establish and maintain a record of the sulfur content (percent, by weight) of the "as-fired" fuel oil using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or equivalent, to analyze a representative sample of the blended fuel following each fuel delivery. This record may be maintained either by;
   1) retaining the delivery receipts that are provided by the fuel oil vendor (which indicates that the proper ASTM test methods have been followed) each time a fuel oil delivery is received, or;
   2) by "as-fired" sample results provided by the permittee.
b. Establish and maintain a record of the sulfur content of the "as-fired" natural gas using either ASTM D1072-90(94)E-1, ASTM D3031-81(86), ASTM D3246-92, ASTM D4084-94, or equivalent. This record may be maintained either by;
   1) retaining delivery receipts provided by the natural gas vendor (which indicates that the proper ASTM test methods have been followed and which shall be provided, at a minimum, each time there is a measurable increase in the sulfur content of the natural gas), or;
   2) by on-site sample results provided by the permittee, or;
   3) by utilizing the FERC Tariff guaranteed maximum sulfur content of 10 grains per 100 cubic feet of natural gas as a "default value".
c. Establish and maintain a record of either the density (using ASTM D 1298-80, or equivalent), or the mass, and the calorific heat value in Btu per pound (using ASTM D 240-76, or equivalent), of the fuel oil combusted. This record may be maintained either by;
   1) retaining the delivery receipts that are provided by the fuel oil vendor (which indicates that the proper ASTM test methods have been followed) each time a fuel oil delivery is received, or;
   2) by on-site sample results provided by the permittee, or;
   3) by utilizing data provided by a certified continuous mass flow monitor in accordance with 40 CFR 75, Appendix D.
d. Record daily the amount of each fuel fired, the sulfur content (percent, by weight) of each fuel, either the density or mass of the fuel oil, and the calorific heat value of each fuel. For all fuels fired, the highest value for any parameter (i.e., density, calorific heat value, etc.) that has been established by the vendor's receipt shall be utilized until an as-fired fuel analysis is received to establish a new value for the parameter in question.
e. Utilize the information in a., b. c. and d., above, to calculate the SO_2 emission rate to ensure compliance at all times.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. & 62-297.440, F.A.C.; and, Applicant Request dated July 10, 1997]

12. Comment:

Conditions A.24 and B.29 relate to operating conditions during particulate matter testing. It should be noted that the City is unable to assure the availability of the highest sulfur content fuel oil when compliance testing is conducted. Thus, the City would potentially be required to vacate one of the fuel oil storage tanks and order enough of the higher sulfur fuel oil in order to complete compliance testing. Similarly, the City has noted minor fluctuations in the sulfur content of a single delivery of fuel oil due to factors such as precision and accuracy of analytical equipment and test methods. Such fluctuations could be construed as a violation of conditions A.24 and B.29 under the proper circumstances (e.g., a 0.98 percent sulfur content recorded during the year and a 0.94

percent sulfur content recorded at the time of compliance testing). Thus, the City is requesting that FDEP recognize these burdens and adopt the conditions of the existing Air Operating permits by deleting the requirement to test while firing the highest sulfur content fuel oil used since the last test.

Response:

This request is acceptable.

As a result of this comment, **Condition Numbers A.24. and B.29.** are changed:

From:
A.24. Operating Conditions During Testing - Particulate Matter. When required, testing for particulate matter emissions shall be conducted while firing fuel oil that contains a sulfur content equal to the highest sulfur content used since the last test and the corresponding ratio of fuel oil to natural gas that was fired at that time.
[Rules 62-4.070(3) and 62-296.405(1)(c)3., F.A.C.]

B.29. Operating Conditions During Testing - Particulate Matter. When required, testing for particulate matter emissions shall be conducted while firing fuel oil that contains a sulfur content equal to the highest sulfur content used since the last test and the corresponding ratio of fuel oil to natural gas that was fired at that time.
[Rules 62-4.070(3) and 62-296.405(1)(c)3., F.A.C.]

To:
A.24. Operating Conditions During Testing. If particulate matter and visible emissions tests are required, the tests shall be conducted concurrently and shall be performed using the maximum fuel oil to natural gas ratio that can be fired while meeting the standards.
[Rule 62-4.070(3), F.A.C.; and, Applicant request dated June 18, 1997.]

B.26. Operating Conditions During Testing. If particulate matter and visible emissions tests are required, the tests shall be conducted concurrently and shall be performed using the maximum fuel oil to natural gas ratio that can be fired while meeting the standards.
[Rule 62-4.070(3), F.A.C.; and, Applicant request dated June 18, 1997.]

Subsection A

13. Comment:

The City is revising the exit temperature of Boiler No. 1 in the Permit Application. As such, the City requests FDEP to make corresponding revisions to the Permitting Notes to reflect the range of exit temperatures as 260 - 305°F.

Response:

This request is acceptable.

As a result of this comment, the **Permitting Note** following the emission unit description is changed:

From:
{Permitting notes: This emissions unit is regulated under Acid Rain, Phase II. This emissions 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. Stack height = 200 feet, exit diameter = 11.0 feet, exit temperature = 260.6

°F, actual volumetric flow rate = 223,755 acfm. Emissions from this boiler are uncontrolled. This unit began commercial operation in May of 1971.}

To:
{Permitting notes: This emissions unit is regulated under Acid Rain, Phase II. This emissions 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. Stack height = 200 feet, exit diameter = 11.0 feet, exit temperature = 260 - 305 °F, actual volumetric flow rate = 223,755 acfm. Emissions from this boiler are uncontrolled. This unit began commercial operation in May of 1971.}

Subsection B

14. Comment:

The City is revising the exit temperature of Boiler No. 2 in the Permit Application. As such, the City requests FDEP to make corresponding revisions to the Permitting Notes to reflect the range of exit temperatures as 220 - 305°F.

Response:

This request is acceptable.

As a result of this comment, the **Permitting Note** following the emission unit description is changed:

From:
{Permitting notes: This emissions unit is regulated under Acid Rain, Phase II and the Florida Electrical Power Plant Siting Act (permit number PA 74-03D). This emissions 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. Stack height = 250 feet, exit diameter = 14.0 feet, exit temperature = 260.6 °F, actual volumetric flow rate = 636,706 acfm. Emissions from this boiler are uncontrolled. This unit began commercial operation in October of 1977.}

To:
{Permitting notes: This emissions unit is regulated under Acid Rain, Phase II and the Florida Electrical Power Plant Siting Act (permit number PA 74-03D). This emissions 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. Stack height = 250 feet, exit diameter = 14.0 feet, exit temperature = 220 - 305°F, actual volumetric flow rate = 636,706 acfm. Emissions from this boiler are uncontrolled. This unit began commercial operation in October of 1977.}

15. Comment:

Please delete Condition B.17, B.18, and B.20. Boiler No. 2 is an existing unit not subject to Rule 62-296.405(1)(f)1.c, F.A.C.

Response:

This request is acceptable. The remainder of Subsection B will be re-numbered accordingly.

16. Comment:

The City has revised/added to the Emissions Unit Inventory included in the Permit Application (see attached HGS-06). As such, the City requests that FDEP make a corresponding revision to the list of exempt (Appendix E-1) and unregulated (Appendix U-1) emissions units and/or activities. The revised lists should reflect the following:

Appendix E-1

- Exempt emission numbers 10 - 18 are associated with Boiler No. 2, not Boiler No. 1.
- Add a new Diesel Oil Tank associated with the Hydrant Main.
- Distinguish that the fuel farm has three transfer stations and two loading/unloading stations.
- Revision to exempt emission No. 50 to reflect a change from (15) to (1-15).
- Add (1-12) Space Heaters.
- Add Laboratory emission units (Laboratory Fume Hoods, Laboratory Equipment, Chemical Usage, and Vacuum Pump).

Appendix U-1

- Add the category "General Purpose Internal Combustion Engines" and include the Diesel driven Pump associated with the Hydrant Main, welding generator, portable diesel pump, and portable generator.
- Add the category "Emergency Generators" and include the two emergency generators.

Response:

This request is acceptable.

As a result of this comment, **Appendix E-1** is changed:

From:

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

City of Tallahassee, Electric Utilities
Arvah B. Hopkins Generating Station

DRAFT Permit No.: 0730003-001-AV
Facility ID No.: 0730003

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

Exempt Emissions Related to Steam Generator No. 1

1. Deareator Tank Vents
2. Air Ejectors
3. Oil Vapor Extractors

4. Noncondensable Gas Extractors
5. Seal Oil Vacuum Pumps
6. Lube Oil Tanks (storage)
7. Lube/Fuel Oil Drip Pans
8. Hydrogen Gas Vents
9. Fuel Oil Piping
10. City of Tallahassee Electric Utility Generated Non-hazardous Boiler Chemical Cleaning Wastes

Exempt Emissions Related to Steam Generator No. 1

11. Deareator Tank Vents
12. Air Ejectors
13. Oil Vapor Extractors
14. Noncondensable Gas Extractors
15. Seal Oil Vacuum Pumps
16. Lube Oil Tanks (storage)
17. Lube/Fuel Oil Drip Pans
18. Hydrogen Gas Vents
19. Fuel Oil Piping
20. City of Tallahassee Electric Utility Generated Non-hazardous Boiler Chemical Cleaning Wastes

Exempt Emissions Related to Combustion Turbine No. 1

21. Diesel Engine (Starter)
22. Diesel Tank (#10)
23. Oil Vapor Extractor
24. Lube Oil Tank
25. Natural Gas Blowdown
26. Fuel Oil Piping

Exempt Emissions Related to Combustion Turbine No. 2

27. Diesel Engine (Starter)
28. Diesel Tank (#11)
29. Oil Vapor Extractor
30. Lube Oil Tank
31. Natural Gas Blowdown
32. Fuel Oil Piping

Fuel Storage

33. Day Tank (Diesel Tank # 12)
34. Diesel Fuel Dispensing Operation

Emergency Generator

35. Diesel Engine - Exempt per Rule 62-210.300(3)(a)21, F.A.C.
36. Diesel Tank (#13)

Fuel Farm

37. Diesel Tank #1
38. Diesel Tank #2
39. Fuel Oil Tank #3
40. Fuel Oil Tank #4
41. Fuel Oil Piping
42. Fuel Station #1

43. Fuel Station #2
44.
45. Fuel Dispensing Operations
46. Truck Loading/Unloading (for items 35-41)
47. Gasoline Tank
48. Gasoline Pump
49. Diesel Oil Tank
50. Diesel Pump

Organic Liquid Storage
51. Kerosene Tank #7
52. Lube Oil Tank #8
53. Lube Oil Tank #9

Fugitive VOC Emissions
54. (15) Parts Washers - Non-halogenated Solvents

55. (2) Fresh Water Cooling Towers

56. Central Vacuum System

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

Plant Operations
58. Lube Oil Storage Tanks
59. Propane Storage Tanks

Fugitive PM_{10} Emissions
60. Paved Roads
61. Unpaved Roads
62. Heavy Construction Activities
63. Aggregate Handling & Storage

Gasoline Engines
64. Welding Generator - Exempt per Rule 62-210.300(3)(a)21, F.A.C.
65. (2) Emergency Generators - Exempt per Rule 62-210.300(3)(a)21, F.A.C.

To:

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

City of Tallahassee, Electric Utilities
Arvah B. Hopkins Generating Station

DRAFT Permit No.: 0730003-001-AV
Facility ID No.: 0730003

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

Exempt Emissions Related to Steam Generator No. 1

1. Deareator Tank Vents
2. Air Ejectors
3. Oil Vapor Extractors
4. Noncondensable Gas Extractors
5. Seal Oil Vacuum Pumps
6. Lube Oil Tanks (storage)
7. Lube/Fuel Oil Drip Pans
8. Hydrogen Gas Vents
9. Fuel Oil Piping
10. City of Tallahassee Electric Utility Generated Non-hazardous Boiler Chemical Cleaning Wastes

Exempt Emissions Related to Steam Generator No. 2

11. Deareator Tank Vents
12. Air Ejectors
13. Oil Vapor Extractors
14. Noncondensable Gas Extractors
15. Seal Oil Vacuum Pumps
16. Lube Oil Tanks (storage)
17. Lube/Fuel Oil Drip Pans
18. Hydrogen Gas Vents
19. Fuel Oil Piping
20. City of Tallahassee Electric Utility Generated Non-hazardous Boiler Chemical Cleaning Wastes

Exempt Emissions Related to Combustion Turbine No. 1

21. Diesel Engine (Starter)
22. Diesel Tank (#10)
23. Oil Vapor Extractor
24. Lube Oil Tank
25. Natural Gas Blowdown
26. Fuel Oil Piping

Exempt Emissions Related to Combustion Turbine No. 2

27. Diesel Engine (Starter)
28. Diesel Tank (#11)
29. Oil Vapor Extractor
30. Lube Oil Tank
31. Natural Gas Blowdown
32. Fuel Oil Piping

Fuel Storage

33. Day Tank (Diesel Tank #12)
34. Diesel Fuel Dispensing Operation
35. Diesel Tank (#13)

Fuel Farm

36. Diesel Tank #1
37. Diesel Tank #2

38. Fuel Oil Tank #3
39. Fuel Oil Tank #4
40. Fuel Oil Piping
41. Fuel Oil Transfer Station #1
42. Fuel Oil Transfer Station #2
43. Diesel Oil Transfer Station
44. (New) Diesel Oil Tank Associated With the Hydrant Main

Fuel Dispensing Operations

45. Truck Loading/Unloading Station #1 (for items 35 & 36)
46. Truck Loading/Unloading Station #2 (for items 37 & 38)
47. Gasoline Tank
48. Gasoline Pump
49. Diesel Oil Tank
50. Diesel Pump

Organic Liquid Storage

51. Kerosene Tank #7
52. Lube Oil Tank #8
53. Lube Oil Tank #9

Fugitive VOC Emissions

54. (1-15) Parts Washers - Non-halogenated Solvents

Space Heaters

55. (1-12) Space Heaters

56. (2) Fresh Water Cooling Towers

57. Central Vacuum System

Maintenance Activities

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

Plant Operations

59. Lube Oil Storage Tanks
60. Propane Storage Tanks

Fugitive PM_{10} Emissions

61. Paved Roads
62. Unpaved Roads
63. Heavy Construction Activities
64. Aggregate Handling & Storage

Laboratory

65. Laboratory Equipment
66. Chemical Usage
67. Vacuum Pumps
68. Laboratory Fume Hoods

Also as a result of this comment, **Appendix U-1, List of Unregulated Emissions Units and/or Activities** is changed:

From:

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

City of Tallahassee, Electric Utilities
Arvah B. Hopkins Generating Station

DRAFT Permit No.: 0730003-001-AV
Facility ID No.: 0730003

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

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

E.U. ID No.	Brief Description of Emissions Units and/or Activity
-xxx	Fugitive VOC Sources - Painting Operations

Fugitive VOC emissions are generated from the painting operations associated with normal plant maintenance. SCC: 4-90-999-98, Miscellaneous Volatile Organic Compound Evaporation.

To:

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

City of Tallahassee, Electric Utilities
Arvah B. Hopkins Generating Station

DRAFT Permit No.: 0730003-001-AV
Facility ID No.: 0730003

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

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

E.U. ID No.	Brief Description of Emissions Units and/or Activity
-xxx	Fugitive VOC Sources - Painting Operations
-yyy	General Purpose Internal Combustion Engines
-zzz	Emergency Generators

-xxx Fugitive VOC Emissions. Fugitive VOC emissions are generated from the painting operations associated with normal plant maintenance. SCC: 4-90-999-98, Miscellaneous Volatile Organic Compound Evaporation.

-yyy General Purpose Internal Combustion Engines.
Located for use at this source is (1) Welding Generator. SCC: 2-03-003-01.
Diesel Driven Fire Pump (Associated With the Hydrant Main). SCC: 2-03-001-01.
Portable Diesel Pump. SCC: 2-03-001-01.

-zzz Emergency Generators.
Located for use at this source is (1) Stationary Emergency Generator. SCC: 2-03-001-01.
(3) Portable Emergency Generators. SCC: 2-03-003-01.

Permit History/ID Number Changes (Appendix H-1)

17. Comment:

Emission Unit ID No. 002 should include the term "Combustion" as part of the Description.

Response:

This request is acceptable.

As a result of this comment, **Appendix H-1, Permit History/ID Number Changes** is changed:

From:

-002	Turbine Hopkins #1	AO37-242824	03/08/94	12/31/98	06/10/94, 06/24/94

To:

-002	Combustion Turbine Hopkins #1	AO37-242824	03/08/94	12/31/98	06/10/94, 06/24/94

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

18. Comment:

In the "Standards" column, 60 percent opacity should be added for soot blowing and load changes for 3 hours/day for Boilers 1 and 2.

Response:

Table 1-1 is just a simplified summary of standard conditions/requirements for normal operations. The referenced 60 percent opacity is, by rule, excess emissions, not normal conditions. Therefore, the request is not acceptable and no change will be made.

19. Comment:

The City requests that a footnote be added regarding excess emission for startup, shutdown, and malfunctions, as appropriate, and the reference to 62-200 in the "Regulatory Citation" column should be changed to 62-210.

Response:

The requested footnote is not appropriate because the table is just a simplified summary of standard conditions/requirements for normal operations and, therefore, no change will be made to the footnotes. The reference to 62-200.700(3) will be changed to 62-210.700(3).

As a result of this comment, the PM - SB section for Boiler #2 in **Table 1-1, Summary of Air Pollutant Standards and Terms** is changed:

From:

PM - SB	No. 2 - No. 6 F.O.	3 hr/day	0.3 lb/MMBtu	N/A	N/A	697.5	1,272.94	62-200.700(3)	B.8.
**	Natural Gas	3 hr/day	0.3 lb/MMBtu	N/A	N/A	697.5	1,272.94	62-200.700(3)	B.8.

To:

PM - SB	No. 2 - No. 6 F.O.	3 hr/day	0.3 lb/MMBtu	N/A	N/A	697.5	1,272.94	62-210.700(3)	B.8.
**	Natural Gas	3 hr/day	0.3 lb/MMBtu	N/A	N/A	697.5	1,272.94	62-210.700(3)	B.8.

20. Comment:

The City requests that a summary of the NOx emissions standards be included for Boiler No. 2.

Response:

This request is acceptable.

As a result of this comment, the **Boiler #2 section of Table 1-1** is changed:

From:

Boiler #2	VE	No. 2 - No. 6 F.O.	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	B.5. & B.6.
(2,325 MMBtu/hour - Oil)		Natural Gas	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	B.5. & B.6.
(2,500 MMBtu/hour - Gas)	PM	No. 2 - No. 6 F.O.	8760	0.1 lb/MMBtu	N/A	N/A	232.5	1,018.4	62-296.405(1)(b)	B.7.
		Natural Gas	8760	0.1 lb/MMBtu	N/A	N/A	250.0	1,095.0	62-296.405(1)(b)	B.7.
	PM-SB	No. 2 - No. 6 F.O.	3 hr/day	0.3 lb/MMBtu	N/A	N/A	697.5	1,272.9	62-200.700(3)	B.8.
Acid Rain Phase II Unit	**	Natural Gas	3 hr/day	0.3 lb/MMBtu	N/A	N/A	750.0	1,368.8	62-200.700(3)	B.8.
(238 MW Turbine-generator)	SO_2	No. 2 - No. 6 F.O.	8760	1.4 lb/MMBtu	N/A	N/A	3,255.0	14,256.9	62-296.405(1)(c)1.h.	B.10.
		Natural Gas	8760	N/A	N/A	N/A	N/A	N/A	62-296.405(1)(c)	B.10.

To:

Boiler #2	VE	No. 2 - No. 6 F.O.	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	B.5. & B.6.
(2,325 MMBtu/hour - Oil)		Natural Gas	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	B.5. & B.6.
(2,500 MMBtu/hour - Gas)	PM	No. 2 - No. 6 F.O.	8760	0.1 lb/MMBtu	N/A	N/A	232.5	1,018.4	62-296.405(1)(b)	B.7.
		Natural Gas	8760	0.1 lb/MMBtu	N/A	N/A	250.0	1,095.0	62-296.405(1)(b)	B.7.
	PM-SB	No. 2 - No. 6 F.O.	3 hr/day	0.3 lb/MMBtu	N/A	N/A	697.5	1,272.9	62-200.700(3)	B.8.
Acid Rain Phase II Unit	**	Natural Gas	3 hr/day	0.3 lb/MMBtu	N/A	N/A	750.0	1,368.8	62-200.700(3)	B.8.
(238 MW Turbine-generator)	SO_2	No. 2 - No. 6 F.O.	8760	1.4 lb/MMBtu	N/A	N/A	3,255.0	14,256.9	62-296.405(1)(c)1.h.	B.10.
		Natural Gas	8760	N/A	N/A	N/A	N/A	N/A	62-296.405(1)(c)	B.10.
	NO_x	No. 2 - No. 6 F.O.	8760	0.3 lb/MMBtu	N/A	N/A	697.5	3,055.1	62-296.405(1)(d)3.	B.11.
		Natural Gas	8760	0.3 lb/MMBtu	N/A	N/A	750.0	3,285.0	62-296.405(1)(d)3.	B.11.

21. Comment:

The Regulatory Citation for the Boiler No. 1 and No. 2 sulfur dioxide limits should be noted as Applicant Request.

Response:

The regulatory citation for Boiler No. 1 is already noted as "Applicant Request", Boiler No. 2 will be changed to match.

As a result of this comment, the **Boiler #2 sections of Table 1-1** are changed:

From:

Boiler #2	VE	No. 2 - No. 6 F.O.	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	B.5. & B.6.
(2,325 MMBtu/hour - Oil)		Natural Gas	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	B.5. & B.6.
(2,500 MMBtu/hour - Gas)	PM	No. 2 - No. 6 F.O.	8760	0.1 lb/MMBtu	N/A	N/A	232.5	1,018.4	62-296.405(1)(b)	B.7.
		Natural Gas	8760	0.1 lb/MMBtu	N/A	N/A	250.0	1,095.0	62-296.405(1)(b)	B.7.
	PM-SB	No. 2 - No. 6 F.O.	3 hr/day	0.3 lb/MMBtu	N/A	N/A	697.5	1,272.9	62-200.700(3)	B.8.
Acid Rain Phase II Unit	**	Natural Gas	3 hr/day	0.3 lb/MMBtu	N/A	N/A	750.0	1,368.8	62-200.700(3)	B.8.
(238 MW Turbine-generator)	SO_2	No. 2 - No. 6 F.O.	8760	1.4 lb/MMBtu	N/A	N/A	3,255.0	14,256.9	62-296.405(1)(c)1.h.	B.10.
		Natural Gas	8760	N/A	N/A	N/A	N/A	N/A	62-296.405(1)(c)	B.10.
	NO_x	No. 2 - No. 6 F.O.	8760	0.3 lb/MMBtu	N/A	N/A	697.5	3,055.1	62-296.405(1)(d)3.	B.11.
		Natural Gas	8760	0.3 lb/MMBtu	N/A	N/A	750.0	3,285.0	62-296.405(1)(d)3.	B.11.

To:

Boiler #2	VE	No. 2 - No. 6 F.O.	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	B.5. & B.6.
(2,325 MMBtu/hour - Oil)		Natural Gas	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	B.5. & B.6.
(2,500 MMBtu/hour - Gas)	PM	No. 2 - No. 6 F.O.	8760	0.1 lb/MMBtu	N/A	N/A	232.5	1,018.4	62-296.405(1)(b)	B.7.
		Natural Gas	8760	0.1 lb/MMBtu	N/A	N/A	250.0	1,095.0	62-296.405(1)(b)	B.7.
	PM-SB	No. 2 - No. 6 F.O.	3 hr/day	0.3 lb/MMBtu	N/A	N/A	697.5	1,272.9	62-200.700(3)	B.8.
Acid Rain Phase II Unit	**	Natural Gas	3 hr/day	0.3 lb/MMBtu	N/A	N/A	750.0	1,368.8	62-200.700(3)	B.8.
(238 MW Turbine-generator)	SO_2	No. 2 - No. 6 F.O.	8760	1.4 lb/MMBtu	N/A	N/A	3,255.0	14,256.9	Applicant Request	B.10.
		Natural Gas	8760	N/A	N/A	N/A	N/A	N/A	62-296.405(1)(c)	B.10.
	NO_x	No. 2 - No. 6 F.O.	8760	0.3 lb/MMBtu	N/A	N/A	697.5	3,055.1	62-296.405(1)(d)3.	B.11.
		Natural Gas	8760	0.3 lb/MMBtu	N/A	N/A	750.0	3,285.0	62-296.405(1)(d)3.	B.11.

22. Comment:

The annual equivalent emissions for sulfur dioxide from the Combustion Turbine No. 1 (CT1) was not correct in the Draft Permit. The City requests FDEP to revise the annual sulfur dioxide emission calculated for CT1.

Response:

This request is acceptable.

As a result of this comment, the **CT1 Section of Table 1-1** is changed:

From:

-002	Combustion Turbine No. 1 (228 MMBtu/hour)	VE	No. 2 F.O.	8491	Less than 20%	N/A	N/A	N/A	N/A
			Natural Gas	8491	Less than 20%	N/A	N/A	N/A	N/A
		SO_2	No. 2 F.O.	8491	0.4% sulfur	N/A	N/A	97.4	340.6
			Natural Gas	8491	N/A	N/A	N/A	N/A	N/A

To:

-002	Combustion Turbine No. 1 (228 MMBtu/hour)	VE	No. 2 F.O.	8491	Less than 20%	N/A	N/A	N/A	N/A
			Natural Gas	8491	Less than 20%	N/A	N/A	N/A	N/A
		SO_2	No. 2 F.O.	8491	0.4% sulfur	N/A	N/A	97.4	413.5
			Natural Gas	8491	N/A	N/A	N/A	N/A	N/A

23. Comment:

The allowable heat input limit for Combustion Turbine No. 2 was not correctly referenced in the Emission Unit Description and equivalent emissions for sulfur dioxide were omitted. The City requests FDEP revise the maximum allowable heat input to 446 MMBtu/hr and include values for the equivalent emissions of sulfur dioxide.

Response:

This request is acceptable.

As a result of this comment, the **CT2 section of Table 1-1** is changed:

From:

-003	Combustion Turbine No. 2 (228 MMBtu/hour)	VE	No. 2 F.O.	7071	Less than 20%	N/A	N/A	N/A	N/A
			Natural Gas	7071	N/A	N/A	N/A	N/A	N/A
		SO2	No. 2 F.O.	7071	0.4% sulfur	N/A	N/A	N/A	N/A
			Natural Gas	7071	N/A	N/A	N/A	N/A	N/A

To:

-003	Combustion Turbine No. 2 (446 MMBtu/hour)	VE	No. 2 F.O.	7071	Less than 20%	N/A	N/A	N/A	N/A
			Natural Gas	7071	N/A	N/A	N/A	N/A	N/A
		SO2	No. 2 F.O.	7071	0.4% sulfur	N/A	N/A	190.6	673.8
			Natural Gas	7071	N/A	N/A	N/A	N/A	N/A

Table 2-1, Summary of Compliance Requirements

24: Comment:

In the "Testing Time Frequency" column, the testing requirements for natural gas should be changed to "N/A." In addition, footnote 3 should be revised to clarify that PM testing is not required prior to renewal if oil is fired less than 400 hours during the prior year.

Response:

The "Testing Time Frequency" for natural gas should only be listed as "N/A" for VE testing. It should be listed as "Annually" for PM testing. Footnote 3 is sufficient as it is. Again, these tables are only summaries of the permit conditions and for the most part, normal operations. Therefore, no changes will be made.

25. Comment:

The City requests that FDEP clarify that the Compliance Testing Duration for particulate matter is based on the average of three 1-hour runs.

Response:

The column heading is "Min. Compliance Test Duration", not "Total Test Requirements". Except for visible emissions testing, the minimum test duration as listed in the rules is "1 hour", not "60 minutes". The compliance tests require that three runs be performed. The test times and frequencies are established by rule and contained in the permit text. Therefore, the text should be referred to for full details and the table is just a summary. The apparent inconsistency between the VE test duration of "60 minutes" and the duration for all other tests of "1 hour" is part of the rule.

As a result of this comment, the "Min. Compliance Test Duration" column of **Table 2-1, Summary of Compliance Requirements** is changed:

From:

E. U. ID No.	Brief Description	Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date [2]	Min. Compliance Test Duration
-001	Boiler #1	VE	No. 2 - No. 6 F.O.	DEP method 9	Annually [3]	7/1 - 9/30	60 Minutes
	-903 MMBtu/hour		Natural Gas	DEP method 9	N/A	7/1 - 9/30	60 Minutes
	-Acid Rain Phase II Unit	PM	No. 2 - No. 6 F.O.	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	60 Minutes
	-75 MW generator		Natural Gas	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	60 Minutes
		SO_2	No. 2 - No. 6 F.O.	Fuel Sampling & Analysis			
-004	Boiler #2	VE	No. 2 - No. 6 F.O.	DEP method 9	Annually	7/1 - 9/30	60 Minutes
	-2,325 MMBtu/hour - Oil		Natural Gas	DEP method 9	N/A	7/1 - 9/30	60 Minutes
	-2,500 MMBtu/Hour - Gas	PM	No. 2 - No. 6 F.O.	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	60 Minutes
	-Acid Rain Phase II Unit		Natural Gas	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	60 Minutes
	-238 MW generator	SO_2	No. 2 - No. 6 F.O.	Fuel sampling & analysis per Acid Rain Phase II commitment			
		NOx	No. 2 - No. 6 F.O	30 day rolling avg.	Continuous	N/A	N/A
			Natural Gas	30 day rolling avg.	Continuous	N/A	N/A
-002	Combustion Turbine No. 1	VE	No. 2 F.O.	EPA Method 9	Annually[4]	7/1 - 9/30	30 Minutes
-003	Combustion Turbine No. 2		Natural Gas	EPA Method 9	Annually[4]	7/1 - 9/30	30 Minutes
		SO_2	No. 2 F.O.	Fuel Sampling & Analysis Provided by Vendor			

To:

E. U. ID No.	Brief Description	Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date [2]	Min. Compliance Test Duration
-001	Boiler #1	VE	No. 2 - No. 6 F.O.	DEP method 9	Annually [3]	7/1 - 9/30	60 Minutes
	-903 MMBtu/hour		Natural Gas	DEP method 9	N/A	7/1 - 9/30	60 Minutes
	-Acid Rain Phase II Unit	PM	No. 2 - No. 6 F.O.	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	1 Hour
	-75 MW generator		Natural Gas	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	1 Hour
		SO_2	No. 2 - No. 6 F.O.	Fuel Sampling & Analysis			
-004	Boiler #2	VE	No. 2 - No. 6 F.O.	DEP method 9	Annually	7/1 - 9/30	60 Minutes
	-2,325 MMBtu/hour - Oil		Natural Gas	DEP method 9	N/A	7/1 - 9/30	60 Minutes
	-2,500 MMBtu/Hour - Gas	PM	No. 2 - No. 6 F.O.	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	1 Hour
	-Acid Rain Phase II Unit		Natural Gas	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	1 Hour
	-238 MW generator	SO_2	No. 2 - No. 6 F.O.	Fuel sampling & analysis per Acid Rain Phase II commitment			
		NOx	No. 2 - No. 6 F.O	30 day rolling avg.	Continuous	N/A	N/A
			Natural Gas	30 day rolling avg.	Continuous	N/A	N/A

			Natural Gas	30 day rolling avg.	Continuous	N/A	N/A
-002	Combustion Turbine No. 1	VE	No. 2 F.O.	EPA Method 9	Annually[4]	7/1 - 9/30	30 Minutes
-003	Combustion Turbine No. 2		Natural Gas	EPA Method 9	Annually[4]	7/1 - 9/30	30 Minutes
		SO_2	No. 2 F.O.	Fuel Sampling & Analysis Provided by Vendor			

B. Memo to file from Jonathan Holtom on May 9, 1997.

1. Comment:

Facility-wide Condition Number 6. contains a sentence that is not part of the rule language. This sentence should be removed.

Response:

This request is acceptable.

As a result of this comment, **Condition Number 6.** is changed:

From:

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

No specific vapor control systems are deemed necessary at this time, however, responsible handling and reasonable containment of VOCs and OSs is required.
[Rule 62-296.320(1)(a), F.A.C.]

To:

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.]

2. Comment:

Due to concerns expressed by the City of Tallahassee regarding the ability to co-fire fuels during testing at the Purdom plant, an additional condition needs to be added to this permit to make it consistent with changes made to the Purdom Draft.

Response:

This issue was addressed in Comment 12., above. No further changes are required.

C. Letter from Mr. Robert E. McGarrah dated July 7, 1997, and received on July 7, 1997.

This letter contained certification pages that were missing from the comments/revisions that were received on June 18, 1997. No additional response is necessary.

D. Documents on file with the permitting authority:
-Letter received June 18, 1997, from Mr. Robert E. McGarrah.
-Memo to file dated June 19, 1997, from Mr. Jonathan Holtom.
-Letter received July 7, 1997, from Mr. Robert E. McGarrah.

III. Conclusion.

The enclosed PROPOSED Title V Air Operation Permit includes the aforementioned changes to the DRAFT Title V Air Operation Permit.

The permitting authority will issue the PROPOSED Permit No.: 0730003-001-AV, with the changes noted above.

City of Tallahassee
Arvah B. Hopkins Generating Station
Facility ID No.: 0730003
Leon County

Initial Title V Air Operation Permit
PROPOSED Permit No.: 0730003-001-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 Permit No.: 0730003-001-AV

Table of Contents

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

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

PROPOSED Permit No.: 0730003-001-AV
Facility ID No.: 0730003
SIC Nos.: 49, 4911
Project: Initial Title V Air Operation Permit

This permit is for the operation of the Arvah B. Hopkins Generating Station. This facility is located at Route 4, Box 450, Geddie Road (County Road 1585), Tallahassee, Leon County; UTM Coordinates: Zone 16, 749.53 km East and 3371.7 km North; Latitude: 30° 27' 08" North and Longitude: 84° 24' 00" 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
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

Howard L. Rhodes, Director,
Division of Air Resources Management

HLR/sms/jh

Section I. Facility Information.

Subsection A. Facility Description.

This facility consists of two fossil fuel-fired steam generators and two combustion turbines. The two steam generators are Phase II Acid Rain Units. Boiler Number 2 is regulated under the Florida Electrical Power Plant Siting Act. The total (nominal) combined electrical generating capacity from the facility is 356.27 megawatts electric (MW), of which, 313 MW are provided by the steam generators and 43.27 MW are provided by the combustion turbines. The fuels used at this facility are natural gas and various combinations of fuel oil. 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).

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
-001	Boiler Number 1, 903 MMBtu/hour (Phase II Acid Rain Unit)
-002	Combustion Turbine Number 1, 228 MMBtu/hour
-003	Combustion Turbine Number 2, 446 MMBtu/hour
-004	Boiler Number 2, 2,325 - 2,500 MMBtu/hour (Phase II Acid Rain Unit)

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

E.U. ID No.	Brief Description
-xxx	Fugitive VOC Sources - Painting Operations
-yyy	General Purpose Engines
-zzz	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)
ASP Number 97-B-01

{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 November 18, 1996
Additional Information Response received February 24, 1997

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

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

a) Concrete mixing in the portable concrete mixer shall be operated on an as-needed basis. Reasonable precautions include enclosing the activity wherever 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.

[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.]

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) 488-3704, day or night, and for emergencies involving a significant threat to human health or the environment is (904) 413-9911. The Department's Northwest District Office (Pensacola) telephone number for routine business, including compliance test notifications, is (904) 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.

Section III. Emissions Units and Conditions.

Subsection A. This section addresses the following emissions unit.

E.U. ID No.	Brief Description
-001	Boiler Number 1 (Phase II Acid Rain Unit)

Emissions unit number 001 is a Foster-Wheeler Corporation fossil fuel fired steam generator (model number SF-5) designated as "Boiler Number 1". It is rated at a maximum heat input of 903 million Btu per hour (MMBtu/hour) when firing natural gas or fuel oil and a nominal 75 megawatt (electric) and 750,000 pounds of steam per hour.

{Permitting notes: This emissions unit is regulated under Acid Rain, Phase II. This emissions 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. Stack height = 200 feet, exit diameter = 11.0 feet, exit temperature = 260 - 305 °F, actual volumetric flow rate = 223,755 acfm. Emissions from this boiler are uncontrolled. This unit began commercial operation in May of 1971.}

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

Essential Potential to Emit (PTE) Parameters

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

Unit No.	MMBtu/hr Heat Input	Fuel Type
-001	903	Natural Gas
	903	No. 2 - No. 6 Fuel Oil; On-Specification Used 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 **A.23.**
[Rule 62-297.310(2), F.A.C.]

A.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 **A.35.**)
[Rule 62-213.410, F.A.C.; and, Applicant's request in initial Title V permit application dated June 14, 1996.]

A.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, AO37-242825, Specific Condition #3.; and, applicant request in initial Title V application received June 14, 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.}

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

A.10. Sulfur Dioxide. For compliance purposes, the following limit supersedes the limit contained in **Specific Condition A.9.** Sulfur dioxide emissions shall not exceed 0.75 pound per million Btu heat input, as measured by applicable compliance methods. Any calculations used to demonstrate compliance shall be based solely on the heating value, quantities, and the percent sulfur of the liquid and gaseous fuels being burned. (See specific conditions **A.11. & A.21.**)
[Rule 62-204.220 & .240, F.A.C.; AO37-242825 specific condition 4 and Applicant's request in initial Title V permit application received June 14, 1996.]

A.11. Fuel Sulfur. Fuel sulfur content (percent, by weight) shall be determined by a fuel analysis representative of all "as-fired" fuels. Prior to burning any fuels in the boiler pursuant to this permit, receipts of the analyses of the existing fuels shall have been received by the City in order to use their values and calculate a maximum allowable fuel blend of natural gas and fuel oil. Upon subsequent fuel deliveries, if the vendor's delivery receipts indicate that the sulfur content of the delivered fuel is greater than the sulfur content established by the previous analysis, then a new maximum allowable fuel blend shall be calculated using the assumption that any future fuel fired contains the higher sulfur content. The resulting maximum allowable fuel blend shall be adhered to until such time that a more accurate analysis has been provided. If the vendor's delivery receipt indicates that the sulfur content of the delivered fuel is less than the sulfur content previously established, a new analysis is only necessary if the permittee wishes to adjust the previously established maximum allowable fuel blend. (See specific conditions **A.10. and A.21.**).
[Rules 62-4.070(3) & 62-296.405(1)(c)3., F.A.C.; and, Applicant Request dated June 18, 1997.]

Excess Emissions

A.12. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

A.13. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
[Rule 62-210.700(2), F.A.C.]

A.14. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

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, NOx and CO_2.}

A.15. Sulfur Dioxide. **The permittee elected to demonstrate compliance using fuel sampling and analysis.** This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. See specific conditions **A.11. and A.21.** of this permit.
[Rule 62-296.405(1)(f)1.b., F.A.C.]

A.16. 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.}

A.17. 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 **A.18.**
[Rule 62-296.405(1)(e)1., F.A.C.]

A.18. 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(9)(c), F.A.C.]

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

A.20. Sulfur Dioxide. The test methods for sulfur dioxide emissions shall be EPA Methods 6, 6A, 6B, or 6C, incorporated by reference in Chapter 62-297, F.A.C. Fuel sampling and analysis may be used as an alternate sampling procedure if such a procedure is incorporated into the operation permit for the emissions unit. If the emissions unit obtains an alternate procedure under the provisions of Rule 62-297.620, F.A.C., the procedure shall become a condition of the emissions unit's permit. The Department will retain the authority to require EPA Method 6 or 6C if it has reason to believe that exceedances 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 using fuel sampling and analysis.** See specific conditions **A.11. and A.21.**
[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.401, F.A.C.; and, AO37-242825.]

A.21. The following fuel sampling and analysis protocol shall be used as an alternate sampling procedure authorized by permit to demonstrate compliance with the sulfur dioxide standard and to provide the necessary values needed to calculate a maximum allowable fuel blend:

a. Establish and maintain a record of the sulfur content (percent, by weight) of the "as-fired" fuel oil using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or equivalent, to analyze a representative sample of the blended fuel following each fuel delivery. This record may be maintained either by;
   1) retaining the delivery receipts that are provided by the fuel oil vendor (which indicates that the proper ASTM test methods have been followed) each time a fuel oil delivery is received, or;
   2) by "as-fired" sample results provided by the permittee.
b. Establish and maintain a record of the sulfur content of the "as-fired" natural gas using either ASTM D1072-90(94)E-1, ASTM D3031-81(86), ASTM D3246-92, ASTM D4084-94, or equivalent. This record may be maintained either by;
   1) retaining delivery receipts provided by the natural gas vendor (which indicates that the proper ASTM test methods have been followed and which shall be provided, at a minimum, each time there is a measurable increase in the sulfur content of the natural gas), or;

2) by on-site sample results provided by the permittee, or;
3) by utilizing the FERC Tariff guaranteed maximum sulfur content of 10 grains per 100 cubic feet of natural gas as a "default value".

c. Establish and maintain a record of either the density (using ASTM D 1298-80, or equivalent), or the mass, and the calorific heat value in Btu per pound (using ASTM D 240-76, or equivalent), of the fuel oil combusted. This record may be maintained either by;
1) retaining the delivery receipts that are provided by the fuel oil vendor (which indicates that the proper ASTM test methods have been followed) each time a fuel oil delivery is received, or;
2) by on-site sample results provided by the permittee, or;
3) by utilizing data provided by a certified continuous mass flow monitor in accordance with 40 CFR 75, Appendix D.

d. Record daily the amount of each fuel fired, the sulfur content (percent, by weight) of each fuel, either the density or mass of the fuel oil, and the calorific heat value of each fuel. For all fuels fired, the highest value for any parameter (i.e., density, calorific heat value, etc.) that has been established by the vendor's receipt shall be utilized until an as-fired fuel analysis is received to establish a new value for the parameter in question.

e. Utilize the information in a., b. c. and d., above, to calculate the SO_2 emission rate to ensure compliance at all times.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. & 62-297.440, F.A.C.; and, Applicant Request dated July 10, 1997]

Compliance Test Requirements

A.22. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.]

A.23. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited,

operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2) & (2)(b), F.A.C.]

A.24. Operating Conditions During Testing. If particulate matter and visible emissions tests are required, the tests shall be conducted concurrently and shall be performed using the maximum fuel oil to natural gas ratio that can be fired while meeting the standards.
[Rule 62-4.070(3), F.A.C.; and, Applicant request dated June 18, 1997.]

A.25. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.]

A.26. 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 agentsof the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

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

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

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

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

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

TABLE 297.310-1
CALIBRATION SCHEDULE

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

A.27. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.]

A.28. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid for more than 400 hours other than during startup.
3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
   a. Did not operate; or
   b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
   c. Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid fuel, other than during startup, for a total of more than 400 hours.
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
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.]

A.29. 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 fuel(s); or
b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
c. only liquid fuel(s) for less than 400 hours per year.

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

A.30. 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 fuel(s); or
b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
c. only liquid fuel(s) for less than 400 hours per year.

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

Recordkeeping and Reporting Requirements

A.31. The owner or operator shall maintain continuous records of fuel consumption and each analysis that provides the heating value and sulfur content for all fuels fired. These records must be of sufficient detail to determine compliance with the allowable sulfur dioxide emission limitation.
[Rule 62-4.070(3), F.A.C.]

A.32. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.
[Rule 62-210.700(6), F.A.C.]

A.33. Submit to the Department a written report of emissions in excess of emission limiting standards as set forth in Rule 62-296.405(1), F.A.C., for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years. [Rules 62-213.440 and 62-296.405(1)(g), F.A.C.]

A.34. Test Reports.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.

(b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

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

18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required `and provided to the person conducting the test are true and correct to his knowledge.

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

Miscellaneous Conditions.

A.35. Used Oil. Burning of on-specification used oil is allowed in 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, 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:
(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.
[40 CFR 279.61 and 761.20(e)]

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.]

[This page intentionally left blank]

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

E.U. ID No.	Brief Description
-004	Boiler Number 2, (Phase II Acid Rain Unit)

Emissions unit number 004 is a Babcock & Wilcox steam generator (model number RB-533) designated as "Boiler Number 2". It is rated at a maximum heat input of 2,325 million Btu per hour (MMBtu/hour) when firing fuel oil and 2,500 MMBtu/hour when firing natural gas and a nominal 238 MW and 1,619,000 pounds of steam per hour.

{Permitting notes: This emissions unit is regulated under Acid Rain, Phase II and the Florida Electrical Power Plant Siting Act (permit number PA 74-03D). This emissions 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. Stack height = 250 feet, exit diameter = 14.0 feet, exit temperature = 220 - 305°F, actual volumetric flow rate = 636,706 acfm. Emissions from this boiler are uncontrolled. This unit began commercial operation in October of 1977.}

The following conditions apply to the emissions unit listed above:

Essential Potential to Emit (PTE) Parameters

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

Unit No.	MMBtu/hr Heat Input	Fuel Type
-004	2,500	Natural Gas
	2,325	No. 2 - No. 6 Fuel Oil; On-Specification Used Oil

Note: When a blend of fuel oil and natural gas is fired, the allowable heat input is prorated based on the percent heat input of each fuel.
[Rules 62-4.160(2), 62-210.200(PTE) & 62-296.405, F.A.C.; and, Applicant request dated June 18, 1997.]

B.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **B.25.**
[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.37.**)
[Rule 62-213.410, F.A.C.; and, Applicant's request in initial Title V permit application dated June 14, 1996.]

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, applicant request in initial Title V application received June 14, 1996.]

Emission Limitations and Standards

{Permitting Note: The attached Table 1-1, 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.
[Rule 62-296.405(1)(a), F.A.C.]

B.6. Visible Emissions. 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.
[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. 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.

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.9. Sulfur Dioxide. Sulfur dioxide emissions when burning liquid fuel 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. For compliance purposes, the following limit supersedes the limit contained in **Specific Condition B.9.** Sulfur dioxide emissions shall not exceed 1.4 pounds per million Btu heat input, as measured by applicable compliance methods. Any calculations used to demonstrate compliance shall be based solely on the heating value, quantities, and the percent sulfur of the liquid and gaseous fuels being burned. (See specific conditions **B.11. & B.23.**)
[Rule 62-204.220 & .240, F.A.C.; AO37-242825 specific condition 4 and Applicant's request in initial Title V permit application received June 14, 1996.]

B.11. Fuel Sulfur. Fuel sulfur content (percent, by weight) shall be determined by a fuel analysis representative of all "as-fired" fuels. Prior to burning any fuels in the boiler pursuant to this permit, receipts of the analyses of the existing fuels shall have been received by the City in order to use their values and calculate a maximum allowable fuel blend of natural gas and fuel oil. Upon subsequent fuel deliveries, if the vendor's delivery receipts indicate that the sulfur content of the delivered fuel is greater than the sulfur content established by the previous analysis, then a new maximum allowable fuel blend shall be calculated using the assumption that any future fuel fired contains the higher sulfur content. The resulting maximum allowable fuel blend shall be adhered to until such time that a more accurate analysis has been provided. If the vendor's delivery receipt indicates that the sulfur content of the delivered fuel is less than the sulfur content previously established, a new analysis is only necessary if the permittee wishes to adjust the previously established maximum allowable fuel blend. (See specific conditions **B.10. and B.23.**)
[Rules 62-4.070(3) & 62-296.405(1)(c)3., F.A.C.; and, Applicant Request dated June 18, 1997.]

B.12. Nitrogen Oxide. Nitrogen oxide emissions shall not exceed 0.3 pounds per million Btu heat input, as measured by applicable compliance methods.
[Rule 62-296.405(1)(d)3., F.A.C.]

Excess Emissions

B.13. 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.]

B.14. 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.]

B.15. 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

{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, NOx and CO_2.}
[Rules 62-296.405(1)(f)1.c. & d., 62-214.320 and 62-214.330, F.A.C.; 40 CFR Part 75 Appendix D, Section 2.1]}

B.16. Sulfur Dioxide. **The permittee elected to demonstrate compliance using fuel sampling and analysis.** This protocol is allowed because the emissions unit does not have an operating flue gas desulfurization device. See specific conditions **B.11. and B.23.** of this permit.
[Rule 62-296.405(1)(f)1.b., F.A.C.]

B.17. Nitrogen Oxides. For emission units that are subject to continuous monitoring requirements under 42 U.S.C. sections 7661-7661f or 40 CFR Part 75, compliance with nitrogen oxides emission limits shall be demonstrated based on a 30-day rolling average, except as specifically provided by 40 CFR Parts 60 or 76.
[Rule 62-296.405(1)(e)4., F.A.C.]

B.18. 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.}

B.19. 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 **B.20.**
[Rule 62-296.405(1)(e)1., F.A.C.]

B.20. 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(9)(c), F.A.C.]

B.21. 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.]

B.22. 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 exceedances 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 using fuel sampling and analysis.** See specific conditions **B.11. and B.23.**
[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. and 62-297.401, F.A.C.; and, AO37-242825.]

B.23. The following fuel sampling and analysis protocol shall be used as an alternate sampling procedure authorized by permit to demonstrate compliance with the sulfur dioxide standard and to provide the necessary values needed to calculate a maximum allowable fuel blend:

a. Establish and maintain a record of the sulfur content (percent, by weight) of the "as-fired" fuel oil using either ASTM D2622-92, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-91, or equivalent, to analyze a representative sample of the blended fuel following each fuel delivery. This record may be maintained either by;
   1) retaining the delivery receipts that are provided by the fuel oil vendor (which indicates that the proper ASTM test methods have been followed) each time a fuel oil delivery is received, or;
   2) by "as-fired" sample results provided by the permittee.

b. Establish and maintain a record of the sulfur content of the "as-fired" natural gas using either ASTM D1072-90(94)E-1, ASTM D3031-81(86), ASTM D3246-92, ASTM D4084-94, or equivalent. This record may be maintained either by;
   1) retaining delivery receipts provided by the natural gas vendor (which indicates that the proper ASTM test methods have been followed and which shall be provided, at a minimum, each time there is a measurable increase in the sulfur content of the natural gas), or;
   2) by on-site sample results provided by the permittee, or;
   3) by utilizing the FERC Tariff guaranteed maximum sulfur content of 10 grains per 100 cubic feet of natural gas as a "default value".

c. Establish and maintain a record of either the density (using ASTM D 1298-80, or equivalent), or the mass, and the calorific heat value in Btu per pound (using ASTM D 240-76, or equivalent), of the fuel oil combusted. This record may be maintained either by;
   1) retaining the delivery receipts that are provided by the fuel oil vendor (which indicates that the proper ASTM test methods have been followed) each time a fuel oil delivery is received, or;
   2) by on-site sample results provided by the permittee, or;
   3) by utilizing data provided by a certified continuous mass flow monitor in accordance with 40 CFR 75, Appendix D.

d. Record daily the amount of each fuel fired, the sulfur content (percent, by weight) of each fuel, either the density or mass of the fuel oil, and the calorific heat value of each fuel. For all fuels fired, the highest value for any parameter (i.e., density, calorific heat value, etc.) that has been established by the vendor's receipt shall be utilized until an as-fired fuel analysis is received to establish a new value for the parameter in question.

e. Utilize the information in a., b. c. and d., above, to calculate the SO_2 emission rate to ensure compliance at all times.

[Rules 62-213.440, 62-296.405(1)(e)3., 62-296.405(1)(f)1.b. & 62-297.440, F.A.C.; and, Applicant Request dated July 10, 1997]

Compliance Test Requirements

B.24. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.]

B.25. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2) & (2)(b), F.A.C.]

B.26. Operating Conditions During Testing. If particulate matter and visible emissions tests are required, the tests shall be conducted concurrently and shall be performed using the maximum fuel oil to natural gas ratio that can be fired while meeting the standards.
[Rule 62-4.070(3), F.A.C.; and, Applicant request dated June 18, 1997.]

B.27. 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.]

B.28. 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 agentsof the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

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

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

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

(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

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

TABLE 297.310-1
CALIBRATION SCHEDULE

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

B.29. 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.]

B.30. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid for more than 400 hours other than during startup.
3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
   a. Did not operate; or
   b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
   b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
   c. Each NESHAP pollutant, if there is an applicable emission standard.
5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid fuel, other than during startup, for a total of more than 400 hours.
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
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.]

B.31. 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 fuel(s); or
b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
c. only liquid fuel(s) for less than 400 hours per year.

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

B.32. 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 fuel(s); or
b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
c. only liquid fuel(s) for less than 400 hours per year.

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

Recordkeeping and Reporting Requirements

B.33. The owner or operator shall maintain continuous records of fuel consumption and each analysis that provides the heating value and sulfur content for all fuels fired. These records must be of sufficient detail to determine compliance with the allowable sulfur dioxide emission limitation.

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

B.34. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

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

B.35. 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.]

B.36. 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.

B.37. Used Oil. Burning of on-specification used oil is allowed in 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, 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:
(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.
[40 CFR 279.61 and 761.20(e)]

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.]

Subsection C. This section addresses the following emissions units.

E.U. ID No.	Brief Description
-002	Combustion Turbine Number 1
-003	Combustion Turbine Number 2

Emissions unit number 002 is a combustion turbine manufactured by Westinghouse (model number W191G) and is designated as "Combustion Turbine Number 1". It is 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 with a maximum sulfur content of 0.4%, by weight. Emissions unit number 003 is a combustion turbine manufactured by Westinghouse (model number W251G) and is designated as "Combustion Turbine Number 2". It is rated at a maximum heat input of 446 million Btu per hour (MMBtu/hour) while being fueled by natural gas and/or No. 2 fuel oil with a maximum sulfur content of 0.4%, by weight. Combustion Turbine Number 1 runs a nominal 16.47 MW generator and Combustion Turbine Number 2 runs a nominal 26.8 MW generator. Emissions from the combustion turbines are uncontrolled.

{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. Each combustion turbine has its own stack. Combustion Turbine Number 1: Stack height = 29 feet, exit diameter = 9.2 feet, exit temperature = 802.4 °F, actual volumetric flow rate = 456,297.2 acfm. Combustion Turbine Number 2: Stack height = 30 feet, exit diameter = 14.7 feet, exit temperature = 874.4 °F, actual volumetric flow rate = 707,144.2 acfm. Combustion Turbine Number 1 began commercial operation in February of 1970, Combustion Turbine Number 2 began commercial operation in September of 1972.}

The following conditions apply to the emissions units listed above:

Essential Potential to Emit (PTE) Parameters

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

Unit No.	MMBtu/hr Heat Input	Fuel Type
-002(CT #1)	228 (LHV @ 80 degrees Fahrenheit)	Natural Gas
	228 (LHV @ 80 degrees Fahrenheit)	No. 2 Fuel Oil
-003 (CT #2)	446 (LHV @ 80 degrees Fahrenheit)	Natural Gas
	446 (LHV @ 80 degrees Fahrenheit)	No. 2 Fuel Oil

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

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

C.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.]

C.4. Hours of Operation. Combustion Turbine Number 1 may operate 8491 hours per year. Combustion Turbine Number 2 may operate 7071 hours per year. The Permittee shall maintain an operation log available for Department inspection that documents the total hours of operation annually.
[Rule 62-210.200, F.A.C., (PTE) and AO37-242824 specific condition number 3.]

Emission Limitations and Standards

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

C.5. 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, AO37-242824.]

C.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. See specific condition **C.12.**
[AO37-242824; and, applicant request on initial Title V application received June 14, 1996.]

Excess Emissions

C.7. Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

C.8. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

C.9. 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 **C.6. and C.12.**
[Rule 62-213.440, F.A.C.]

C.10. Determination of Process Variables.

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

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

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

Test Methods and Procedures

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

C.11. 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.]

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

C.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 sources may be tested at less than capacity. In such cases, the entire heat input vs. inlet temperature curve will be adjusted by the increment equal to the difference between the design heat input value and 105 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report.
[AO37-242824 Specific Condition No. 2; and, Applicant Request dated June 24, 1997.]

C.14. Applicable Test Procedures.

(a) Required Sampling Time.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100

tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

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

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

C.15. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
   a. Did not operate; or
   b. In the case of a fuel burning emissions unit, burned liquid fuel for a total of no more than 400 hours.
4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
   a. Visible emissions, if there is an applicable standard;
8. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
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).]

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.

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

Recordkeeping and Reporting Requirements

C.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.]

C.18. Test Reports.

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

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

[This page intentionally left blank]

Section IV. Acid Rain Part.

Operated by: City of Tallahassee
ORIS Code: 0688

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

The emissions units listed below are regulated under Acid Rain, Phase II.

E.U. ID No.	Description
-001	Boiler Number 1: 903 MMBtu/hour
-004	Boiler Number 2: 2,325 - 2,500 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.

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

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

E.U. ID No.	EPA ID	Year	2000	2001	2002
-001	Boiler 1	SO_2 allowances, under Table 2, 3, or 4 of 40 CFR 73	80*	80*	80*
		NOx limit	**	**	
-004	Boiler 2	SO_2 allowances, under Table 2, 3, or 4 of 40 CFR 73	5476*	5476*	5476*
		NO_x 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 NOx requirements in accordance with the regulations implementing section 407 of the Clean Air Act.

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

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

City of Tallahassee, Electric Utilities
Arvah B. Hopkins Generating Station

PROPOSED Permit No.: 0730003-001-AV
Facility ID No.: 0730003

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

Exempt Emissions Related to Steam Generator No. 1

1. Deareator Tank Vents
2. Air Ejectors
3. Oil Vapor Extractors
4. Noncondensable Gas Extractors
5. Seal Oil Vacuum Pumps
6. Lube Oil Tanks (storage)
7. Lube/Fuel Oil Drip Pans
8. Hydrogen Gas Vents
9. Fuel Oil Piping
10. City of Tallahassee Electric Utility Generated Non-hazardous Boiler Chemical Cleaning Wastes

Exempt Emissions Related to Steam Generator No. 2

11. Deareator Tank Vents
12. Air Ejectors
13. Oil Vapor Extractors
14. Noncondensable Gas Extractors
15. Seal Oil Vacuum Pumps
16. Lube Oil Tanks (storage)
17. Lube/Fuel Oil Drip Pans
18. Hydrogen Gas Vents
19. Fuel Oil Piping
20. City of Tallahassee Electric Utility Generated Non-hazardous Boiler Chemical Cleaning Wastes

Exempt Emissions Related to Combustion Turbine No. 1

21. Diesel Engine (Starter)
22. Diesel Tank (#10)
23. Oil Vapor Extractor
24. Lube Oil Tank
25. Natural Gas Blowdown
26. Fuel Oil Piping

Appendix E-1, Continued.

Exempt Emissions Related to Combustion Turbine No. 2

27. Diesel Engine (Starter)
28. Diesel Tank (#11)
29. Oil Vapor Extractor
30. Lube Oil Tank
31. Natural Gas Blowdown
32. Fuel Oil Piping

Fuel Storage

33. Day Tank (Diesel Tank #12)
34. Diesel Fuel Dispensing Operation
35. Diesel Tank (#13)

Fuel Farm

36. Diesel Tank #1
37. Diesel Tank #2
38. Fuel Oil Tank #3
39. Fuel Oil Tank #4
40. Fuel Oil Piping
41. Fuel Oil Transfer Station #1
42. Fuel Oil Transfer Station #2
43. Diesel Oil Transfer Station
44. (New) Diesel Oil Tank Associated With the Hydrant Main

Fuel Dispensing Operations

45. Truck Loading/Unloading Station #1 (for items 36 & 37)
46. Truck Loading/Unloading Station #2 (for items 38 & 39)
47. Gasoline Tank
48. Gasoline Pump
49. Diesel Oil Tank
50. Diesel Pump

Organic Liquid Storage

51. Kerosene Tank #7
52. Lube Oil Tank #8
53. Lube Oil Tank #9

Fugitive VOC Emissions

54. (1-15) Parts Washers - Non-halogenated Solvents

Space Heaters

55. (1-12) Space Heaters

Appendix E-1, Continued.

56. (2) Fresh Water Cooling Towers

57. Central Vacuum System

Maintenance Activities

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

Plant Operations

59. Lube Oil Storage Tanks
60. Propane Storage Tanks

Fugitive PM_{10} Emissions

61. Paved Roads
62. Unpaved Roads
63. Heavy Construction Activities
64. Aggregate Handling & Storage

Laboratory

65. Laboratory Equipment
66. Chemical Usage
67. Vacuum Pumps
68. Laboratory Fume Hoods

[This page intentionally left blank]

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

City of Tallahassee, Electric Utilities
Arvah B. Hopkins Generating Station

PROPOSED Permit No.: 0730003-001-AV
Facility ID No.: 0730003

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

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

E.U. ID No.	Brief Description of Emissions Units and/or Activity
-xxx	Fugitive VOC Sources - Painting Operations
-yyy	General Purpose Internal Combustion Engines
-zzz	Emergency Generators

-xxx Fugitive VOC Emissions. Fugitive VOC emissions are generated from the painting operations associated with normal plant maintenance. SCC: 4-90-999-98, Miscellaneous Volatile Organic Compound Evaporation.

-yyy General Purpose Internal Combustion Engines.
Located for use at this source is (1) Welding Generator. SCC: 2-03-003-01.
Diesel Driven Fire Pump (Associated With the Hydrant Main). SCC: 2-03-001-01.
Portable Diesel Pump. SCC: 2-03-001-01.

-zzz Emergency Generators.
Located for use at this source is (1) Stationary Emergency Generator. SCC: 2-03-001-01.
(3) Portable Emergency Generators. SCC: 2-03-003-01.

Appendix H-1, Permit History/ID Number Changes

City of Tallahassee
Arvah B. Hopkins Generating Station

PROPOSED Permit No.: 0730003-001-AV
Facility ID No.: 0730003

Permit History (for tracking purposes):

E.U. ID No	Description	Permit No.	Issue Date	Expiration Date	Extended Date[1,2]	Revised Date(s)
-001	Boiler Hopkins #1	AO37-242825	03/08/94	03/01/99		
-002	Combustion Turbine Hopkins #1	AO37-242824	03/08/94	12/31/98		06/10/94, 06/24/94
-003	Combustion Turbine Hopkins #2	AO37-242824	03/08/94	12/31/98		06/10/94, 06/24/94
-004	Unit #2 Boiler	PA74-03D	05/20/75			05/18/94, 10/27/86

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

From: **Facility ID No.**: 10TLH3700003

To: **Facility ID No.**: 0730003

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

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

Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96)

Appendix TV-1, Title V Conditions(version dated 2/27/97)

ASP Number 97-B-01

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

Table 2-1, Compliance Requirements

Phase II Acid Rain Permit Application/Compliance Plan

(Refer to DRAFT Permit No. 0730003-001-AV)

Appendix A-1,
Abreviations, Definitions, Citations, and Identification Numbers
(Version Dated 2/5/97)

(Refer to DRAFT Permit No. 0730003-001-AV)

Appendix SS-1,
Stack Sampling Facilities (version dated 10/7/96)

(Refer to DRAFT Permit No. 0730003-001-AV)

Appendix TV-1,
Title V Conditions (version dated 2/27/97)

(Refer to DRAFT Permit No. 0730003-001-AV)

ASP Number 97-B-01

(Refer to DRAFT Permit No. 0730003-001-AV)

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

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

City of Tallahassee, Electric Utilities Department
Arvah B. Hopkins Generating Station

PROPOSED Permit No.: 0730003-001-AV
Facility ID No.: 0730003

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

E. U. ID No.	Brief Description	Pollutant Name	Fuel(s)	Hours/ Year	Allowable Emissions			Equivalent Emissions*		Regulatory Citation(s)	See Permit Condition(s)
					Standard(s)	lbs./hour	TPY	lbs./hour	TPY		
-001	Boiler #1 (903 MMBtu/hour)	VE	No. 2 - No. 6 F.O.	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	A.5. & A.6.
	Acid Rain Phase II Unit		Natural Gas	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	A.5. & A.6.
		PM	No. 2 - No. 6 F.O.	8760	0.1 lb/MMBtu	N/A	N/A	90.3	395.5	62-296.405(1)(b)	A.7.
			Natural Gas	8760	0.1 lb/MMBtu	N/A	N/A	90.3	395.5	62-296.405(1)(b)	A.7.
		PM - SB	No. 2 - No. 6 F.O.	3 hr/day	0.3 lb/MMBtu	N/A	N/A	270.9	494.4	62-210.700(3)	A.8.
		**	Natural Gas	3 hr/day	0.3 lb/MMBtu	N/A	N/A	270.9	494.4	62-210.700(3)	A.8.
	(75 MW Turbine-generator)	SO_2	No. 2 - No. 6 F.O.	8760	0.75 lb/MMBtu	N/A	N/A	677.3	2,966.4	Applicant Request	A.10.
	(each unit)		Natural Gas	8760	N/A	N/A	N/A	N/A	N/A	62-296.405(1)(c)	A.10.
-004	Boiler #2	VE	No. 2 - No. 6 F.O.	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	B.5. & B.6.
	(2,325 MMBtu/hour - Oil)		Natural Gas	8760	20%; 40% - 1 two min. period/hr.			N/A	N/A	62-296.405(1)(a)	B.5. & B.6.
	(2,500 MMBtu/hour - Gas)	PM	No. 2 - No. 6 F.O.	8760	0.1 lb/MMBtu	N/A	N/A	232.5	1,018.4	62-296.405(1)(b)	B.7.
			Natural Gas	8760	0.1 lb/MMBtu	N/A	N/A	232.5	1,018.4	62-296.405(1)(b)	B.7.
		PM - SB	No. 2 - No. 6 F.O.	3 hr/day	0.3 lb/MMBtu	N/A	N/A	697.5	1,272.9	62-210.700(3)	B.8.
	Acid Rain Phase II Unit	**	Natural Gas	3 hr/day	0.3 lb/MMBtu	N/A	N/A	697.5	1,272.9	62-210.700(3)	B.8.
	(238 MW Turbine-generator)	SO_2	No. 2 - No. 6 F.O.	8760	1.4 lb/MMBtu	N/A	N/A	3,255.0	14,256.9	Applicant Request	B.10.
			Natural Gas	8760	N/A	N/A	N/A	N/A	N/A	62-296.405(1)(c)	B.10.
		NOx	No. 2 - No. 6 F.O.	8760	0.3 lb/MMBtu	N/A	N/A	697.5	3,055.1	62-296.405(1)(d)3.	B.11.
			Natural Gas	8760	0.3 lb/MMBtu	N/A	N/A	750.0	3,285.0	62-296.405(1)(d)3.	B.11.
-002	Combustion Turbine No. 1	VE	No. 2 F.O.	8491	Less than 20%	N/A	N/A	N/A	N/A	62-296.320(4)(b)	C.5.
	(228 MMBtu/hour)		Natural Gas	8491	Less than 20%	N/A	N/A	N/A	N/A	62-296.320(4)(b)	C.5.
		SO_2	No. 2 F.O.	8491	0.4% sulfur	N/A	N/A	97.4	413.5	AO37-242824	C.6.
			Natural Gas	8491	N/A	N/A	N/A	N/A	N/A	N/A	N/A
-003	Combustion Turbine No. 2	VE	No. 2 F.O.	7071	Less than 20%	N/A	N/A	N/A	N/A	62-296.320(4)(b)	C.5.
	(446 MMBtu/hour)		Natural Gas	7071	N/A	N/A	N/A	N/A	N/A	62-296.320(4)(b)	C.5.
		SO2	No. 2 F.O.	7071	0.4% sulfur	N/A	N/A	190.6	673.9	AO37-242824	C.6.
			Natural Gas	7071	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Notes:
* The "Equivalent Emissions" listed are for informational purposes.
** PM - SB refers to "soot blowing" and "load change".

Table 2-1, Summary of Compliance Requirements

Table 2-1, Summary of Compliance Requirements

City of Tallahassee, Electric Utilities
Arvah B. Hopkins Generating Station

PROPOSED Permit No.: 0730003-001-A
Facility ID No.: 07300

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

E. U. ID No.	Brief Description	Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date [2]	Min. Compliance Test Duration	CMS [1]	See Permit Condition(s)
-001	Boiler #1	VE	No. 2 - No. 6 F.O.	DEP method 9	Annually [3]	7/1 - 9/30	60 Minutes	No	A.17., A.18., A.23, A.26., A.
	-903 MMBtu/hour		Natural Gas	DEP method 9	N/A	7/1 - 9/30	60 Minutes	No	
	-Acid Rain Phase II Unit	PM	No. 2 - No. 6 F.O.	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	1 Hour	No	A.19., A.22. - 28., A.30.
	-75 MW generator		Natural Gas	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	1 Hour	No	
		SO_2	No. 2 - No. 6 F.O.	Fuel Sampling & Analysis				No	A.11., A.15., A.20., A.21
004	Boiler #2	VE	No. 2 - No. 6 F.O.	DEP method 9	Annually	7/1 - 9/30	60 Minutes	No	B.22., B.23., B.28., B.31., B.
	-2,325 MMBtu/hour - Oil		Natural Gas	DEP method 9	N/A	7/1 - 9/30	60 Minutes	No	
	-2,500 MMBtu/hour - Gas	PM	No. 2 - No. 6 F.O.	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	1 Hour	No	B.24., B.27. - 33., B.35.
	-Acid Rain Phase II Unit		Natural Gas	17, 5, 5B or 5F	Annually [3]	7/1 - 9/30	1 Hour	No	
	-238 MW generator	SO_2	No. 2 - No. 6 F.O.	Fuel sampling & analysis per Acid Rain Phase II commitment				No	B.11., B.16., B.25., B.26.
		NOx	No. 2 - No. 6 F.O	30 day rolling avg.	Continuous	N/A	N/A	Yes	B.17., B.18., B.19.,
			Natural Gas	30 day rolling avg.	Continuous	N/A	N/A	Yes	
-002	Combustion Turbine No. 1	VE	No. 2 F.O.	EPA Method 9	Annually[4]	7/1 - 9/30	30 Minutes	No	C.11., C.13. - 16.
-003	Combustion Turbine No. 2		Natural Gas	EPA Method 9	Annually[4]	7/1 - 9/30	30 Minutes	No	
		SO_2	No. 2 F.O.	Fuel Sampling & Analysis Provided by Vendor				No	C.9. & C.12.

Notes:

[1] CMS [=] continuous monitoring system.

[2] Frequency base date established for planning purposes only; see Rule 62-297.310, F.A.C.

[3] Test not required in years that fuel oil is fired less than 400 hours.

[4] If a combustion turbine is operated less than 400 hours per year, test is only required once every 5 years, during the year prior to permit renewal.

[electronic file name: 12900012.xls]

OGC FILE CLOSING FORM

Deputy General Counsel Jack Chisolm

Attorney Jeffrey Brown Date 10/23/97.

OGC File # 97-1030 Case Style City of Tallahassee (A.B. Hopkins Generating Station) vs. DEP

The above-referenced OGC file is being closed and sent to archives for storage. See below for summary of final disposition.

ENFORCEMENT CASE

___ Draft Consent Order received, case resolved informally.

___ Consent Order executed, all conditions met.

___ Draft Notice of Violation received, case resolved informally.

___ Notice of Violation issued, Final Order filed, all conditions met.

___ Circuit Court action, document processed, all conditions met.

___ Other (please specify) _____

PERMITTING CASE: Permit Application # 0730003-001-AV

~~Final~~ Title V Proposed Permit Status: ✓ Issued ___ Denied ___ Withdrawn

Date: 7-23-97

✓ Request for Extension of Time - No Petition was Filed.

___ Request for Extension of Time - Petition Filed.
Final Order Filed (date) _____

___ Petition for Hearing Filed.
Final Order Filed (date) _____

___ Appellate Court action, document processed, all conditions met.

___ Other (please specify) _____

OTHER CASES (RULEMAKING, PERSONNEL, ETC.)

Final Disposition _____

cc: ~~District Manager~~ Scott Sheplak

March 1990