



Jeb Bush
Governor

DEP 04-1963

Department of Environmental Protection

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

David B. Struhs
Secretary

November 29, 2004

- CERTIFIED MAIL - RETURN RECEIPT REQUESTED -

Mr. Robert E. McGarrah
Manager Power Production
City of Tallahassee
2602 Jackson Bluff Road
Tallahassee, Florida 32304

OGC NO. 04-0787

ORDER MODIFYING CONDITIONS OF CERTIFICATION

Dear Mr. McGarrah:

The Florida Pollution Control Board issued the Site Certification for Arvah B. Hopkins Generating Station Unit 2 on May 20, 1975. This certification authorized the construction and operation of a 238 megawatt (MW) steam electric power plant and ancillary facilities. The Department of Environmental Protection has subsequently modified the Conditions of Certification on eight different occasions by final orders.

On December 30, 2002, the Department issued DEP Permit 0730003-003-AV. On October 2, 2003, the Department issued DEP Permit #FL0025518-005-IW1S/NR for the Arvah B. Hopkins Generating Station. Pursuant to Rule 62-17.211(4), the Department is required to modify the Conditions of Certification for this facility to conform them to the federal Title V Permit and NPDES Permit.

On September 22, and 23, 2004, all parties to the certification proceeding were provided with notice by certified mail of the Department's intent to modify the Conditions of Certification for this facility, along with a copy of the proposed Order Modifying Conditions of Certification. Those notices are hereby withdrawn. On October 1, 2004, notice of the Department's intent to modify the Conditions of Certification for this facility was published on the Department's website and on the Department's internet home page at <http://www.dep.state.fl.us/> under the link or button titled "Official Notices" regarding this Intent to Modify the Conditions of Certification. On October 6, 2004, the department issued a revised notice of intent to modify the Conditions of Certification for this facility, along with a copy of the proposed Order Modifying Conditions of Certification. Those notices specified that pursuant to Section 403.516, F.S., and Rule 62-17.211, F.A.C., all parties to the certification proceeding have 45 days from the issuance of the notice by mail to such party's last address of record in which file a written objection to the modification; that failure of any of the parties to file a response will constitute a waiver of

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objection to the modification; and that any person who is not already a party to the certification proceeding and whose substantial interests will be affected by the requested modification has 30 days from the date of publication of the public notice to object in writing.

No objections to the modification have been received by the Department. The Conditions of Certification for the Arvah B. Hopkins Generating Station Unit 2 are hereby modified as follows:

I. GENERAL

The following general and specific conditions shall apply to the construction and operation of the City of Tallahassee Arvah B. Hopkins Unit 2.

A. Definitions

The meaning of the terms used herein shall be governed by the definitions contained in Chapters 403, and 373, Florida Statutes (F.S.), and any regulation adopted pursuant thereto and the statutes and regulations of any agency. In the event of any dispute over the meaning of a term used in these conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definitions contained in any other state or federal statute or regulation or, in the alternative, by the use of the commonly accepted meaning as determined by the Department. As used herein:

1. "Application" shall mean the Site Certification Application (SCA) for the Arvah B. Hopkins Unit 2, as supplemented.

2. "DEP" or "Department" shall mean the Florida Department of Environmental Protection.

3. "DHR" shall mean the Florida Department of State, Division of Historical Resources.

4. "FWCC" shall mean the Florida Fish and Wildlife Conservation Commission.

5. "Licensee/permittee" shall mean an applicant which has obtained a certification order for the subject electrical power plant, in this instance, the City of Tallahassee.

6. "Project" and "power plant" shall mean the Arvah B Hopkins Unit 2 and all associated facilities, including but not limited to: the fossil fuel fired generating unit, fuel and water storage tanks, natural gas delivery pipes, industrial wastewater treatment facilities, air pollution control equipment, storm water control facilities, the cooling tower and related facilities.

7. "NFWFMD" shall mean the Northwest Florida Water Management District.

B. Applicable Rules

The construction and operation of the Arvah B Hopkins Unit 2 shall be in accordance with all applicable provisions of at least the following regulations of DEP: Chapters 62-4, 62-17, 62-25, 62-814, 62-256, 62-296, 62-297, 62-301, 62-302, 62-531, 62-532, 62-550, 62-610, 62-620, 62-621, 62-650, 62-699, 62-660, 62-701, 62-769, 62-770, and 62-814, Florida Administrative Code (F.A.C.), or their successors as they are renumbered.

II. CHANGE IN DISCHARGE

All discharges or emissions authorized herein shall be consistent with the terms and conditions of this certification. The discharge of any pollutant identified in this certification more frequent than or at a level in excess of that authorized shall constitute a violation of the certification. Any anticipated facility expansions, production increases, or process modifications which will result in new, different or increased discharges of pollutants or expansion in steam generating capacity must be reported by submission of a new application.

III. GENERAL CONDITIONS

A. Facilities Operation

1. The Licensee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the Licensee to achieve compliance with the terms and conditions of this certification.

2. In the event of a prolonged [thirty (30) days or more] equipment malfunction or shutdown of pollution control equipment, operation may be allowed to resume and continue to take place under an appropriate Department order, provided that the Licensee demonstrates that such operation will be in compliance with all applicable ambient air quality standards and PSD increments, solid waste rules, domestic wastewater rules and industrial wastewater rules. During such malfunction or shutdown, the operation of the Arvah Hopkins Unit 2 shall comply with all other requirements of this certification and all applicable state and federal emission and effluent standards not affected by the malfunction or shutdown which is the subject of the Department's order.

3. The Licensee shall insure that the project complies with the applicable provisions of stormwater discharge requirements of Rule 62-25, F.A.C. and the general conditions of Rule 62-4.540, F.A.C.

B. Non-Compliance Notification

If, for any reason, the Licensee (defined as the applicant or its successors and/or assigns), does not comply with or will be unable to comply with any limitation specified in this certification, the Licensee shall notify the Department's Northwest District office in Pensacola. Any information shall be provided orally within 24 hours from the time the Licensee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Licensee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance including exact dates and time, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

C. Enforcement

The Department may take any and all lawful actions as it deems appropriate to enforce any condition of this certification.

D. Certification - General Conditions

1. This certification is transferable only upon Department approval in accordance with Section 403.516, F.S., Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The City of Tallahassee shall be liable for any noncompliance of the approved activity until the transfer is approved by the Department.

2. These conditions of certification or a copy thereof shall be kept at the work site of the approved activity.

3. The City of Tallahassee shall comply with the following:

a. Upon request, the City of Tallahassee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

b. The City of Tallahassee shall hold at the facility or other location designated by this approval records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the approval, copies of all reports required by this approval, and records of all data used to complete the application for this approval. These materials shall be retained at least three (3) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule. Data utilized to prepare the application may be maintained at the following locations:

City of Tallahassee
Arvah B. Hopkins Generating Station
1125 Geddie Road
Tallahassee, FL 32304

City of Tallahassee
City Hall
300 South Adams Street
Tallahassee, FL 32301-1731

*or subsequent principle office location.

c. Records of monitoring information shall include:

- measurements;
 - (1) the date, exact place, and time of sampling or
 - (2) the person responsible for performing the sampling or
 - measurements;
 - (3) the dates analyses were performed;
 - (4) the person responsible for performing the analyses;
 - (5) the analytical techniques or methods used;
 - (6) the results of such analyses.

4. The Licensee, by accepting these Conditions, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to

- a. Enter upon the Licensee's premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under these Conditions;
- b. Have access to and copy any records that shall be kept under the conditions of these Conditions;
- c. To inspect any monitoring equipment or monitoring method required in this certification and to sample any discharge or pollutants; and
- d. Sample or monitor any substances or parameters at any location necessary to assure compliance with these Conditions or Department rules.

5. When requested by the Department, the Licensee shall within a reasonable time provide any information required by law which is needed to determine compliance with the

certification or any subsequently issued federally delegated or approved permit. The Licensee shall also provide to the Department upon request copies of records required by these Conditions to be kept. If the Licensee becomes aware of relevant facts that were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted or corrections promptly reported to the Department.

6. The Licensee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment.

7. Water quality sampling and monitoring data shall be collected and analyzed in accordance with Rule 62-4.246, Chapters 62-160 and 62-601, F.A.C., and 40 CFR 136, as appropriate.

a. Monitoring results shall be reported at the intervals specified elsewhere in these Conditions and shall be reported on a Discharge Monitoring Report (DMR), DEP Form 62-620.910(10).

b. If the Licensee monitors any contaminant more frequently than required by the permit, using Department approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.

c. Calculations for all limitations which require averaging of measurements shall use an arithmetic mean unless otherwise specified in these Conditions.

d. Under Chapter 62-160, F.A.C., filed procedures for sample collection and laboratory methods shall be performed by following the protocols described in DEP-SOP-001/01 (January 2002). Alternate field procedures and laboratory methods may be used where they have been approved according to the requirements of Rules 62-160.220, 62-160.330, and 62-160.600, F.A.C.

E. Laboratories and Quality Assurance for Wastewater Discharges

1. Any laboratory test required by this permit shall be performed by a laboratory that has been certified by the Department of Health (DOH) under Chapter 64E-1, F.A.C., where such certification is required by Rules 62-160.300(4), F.A.C. For domestic wastewater facilities, the on-site test procedures specified in Rule 62-160.300(4), F.A.C., shall be performed by a laboratory certified test for those parameters or under the direction of an operator certified under Chapter 62-602, F.A.C.

2. When a contract laboratory is used to analyze samples required pursuant to this certification, the Licensee is required to have the samples taken by qualified personnel following EPA and Department approved sampling procedures and chain-of-custody requirements in accordance with Rule 62-160, F.A.C.

E. Procedures for Post-Certification Submittals

1. Purpose of Submittals

Conditions of certification which provide for the post-certification submittal of information to DEP by the City of Tallahassee are for the purpose of facilitating DEP's monitoring of the effects arising from the location of the transmission line ROW and the construction and maintenance of the reclaimed water pipeline and the plant facilities. This monitoring is for DEP to assure, in consultation with other agencies with applicable regulatory jurisdiction, continued compliance with the conditions of certification, without any further agency action.

2. Filings

All post-certification submittals of information by the City of Tallahassee are to be filed with DEP. Copies of each submittal shall be simultaneously submitted to any other agency indicated in the specific conditions requiring the post-certification submittals.

3. Completeness

The DEP shall promptly review each post-certification submittal for completeness. This review shall include consultation with the other agencies receiving the post-certification submittal. For the purposes of this condition, completeness shall mean that the information submitted is both complete and sufficient. If found to be incomplete, the City of Tallahassee shall be so notified. Failure to issue such a notice within forty-five (45) days after filing of the submittal shall constitute a finding of completeness.

4. Interagency Meetings

Within sixty (60) days of the filing of a complete post-certification submittal, DEP may conduct an interagency meeting with other agencies which received copies of the submittal. The purpose of such an interagency meeting shall be for the agencies with regulatory jurisdiction over the matters addressed in the post-certification submittal to discuss whether reasonable assurance of compliance with the conditions of certification has been provided. Failure of any agency to attend an interagency meeting shall not be grounds for DEP to withhold a determination of compliance with these conditions nor to delay the time frames for review established by these conditions.

5. Reasonable Assurance of Compliance

Within ninety (90) days of the filing of a complete post-certification submittal, or 45 days after a submittal is made by the applicant, or unless another date is specified herein, DEP shall give written notification to the City of Tallahassee and the agencies to which the post-certification information was submitted of its determination whether there is reasonable assurance of compliance with the conditions of certification. If it is determined that reasonable

assurance has not been provided, the City of Tallahassee shall be notified with particularity and possible corrective measures suggested. Failure to notify The City of Tallahassee in writing within ninety (90) days of receipt of a complete post-certification submittal shall constitute a compliance determination.

IV. ADVERSE IMPACT

The Licensee shall take all reasonable steps to minimize any adverse impact resulting from noncompliance with any limitation specified in this certification, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge. The Licensee shall not adversely impact any jurisdictional wetland without prior approval. (403.511(5)(a), F.S., 62-4.050, F.A.C. and 62-343, F.A.C.)

V. RIGHT OF ENTRY

The Licensee shall allow during normal business hours the Secretary of the Florida Department of Environmental Protection and/or authorized representatives, including representatives of the NFWFMD upon the presentation of credentials:

- A. To enter upon the Licensee's premises where an emission or effluent source is located or in which records are required to be kept under the terms and conditions of this certification;
- B. To have access during normal business hours (Monday - Friday, 7:00 a.m. to 3:30 p.m.) to any records required to be kept under the conditions of this certification for examination and copying;
- C. To inspect and test any monitoring equipment or monitoring method required in this certification and to sample any discharge or pollutants, or monitor any substances or parameters at any location reasonably necessary to assure compliance with this certification or Department rules; and,
- D. To assess any damage to the environment or violation of ambient standards.

VI. REVOCATION OR SUSPENSION

After notice and opportunity for a hearing, this certification may be suspended, or revoked in whole or in part during its terms for cause including, but not limited to, the provision or Section 403.512, Chapter 403, Florida Statutes.

VII. CIVIL AND CRIMINAL LIABILITY

Nothing in this certification shall preclude the institution of any legal action or relieve the Licensee from responsibilities, or penalties established pursuant to any applicable State Statutes, or Regulation, including Departmental rules and or regulations promulgated by the Department

pursuant to Chapter 403, F.S.

VIII. PROPERTY RIGHTS

The issuance of this certification does not convey any property rights in either real or personal property, nor any exclusive privileges, nor does it authorize any injury to public or private property or any invasion of personal rights nor any infringement of federal, state or local laws or regulations. This certification conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

IX. SEVERABILITY

The provisions of this certification are severable, and if any provision of this certification or the application of any provision of this certification to any circumstances, is held invalid, the application of such provisions to other circumstances and the remainder of the certification shall not be affected thereby.

X. REVIEW OF SITE CERTIFICATION

The certification shall be final unless revised, revoked, or suspended pursuant to law. At least every five (5) years from the date of issuance of certification the Department may review these conditions of certification and propose any needed changes.

XI. CERTIFICATION PERIOD

This certification shall be in perpetuity as to the use as a steam electric generating unit, provided all conditions of certification are complied with, and subject to the Florida Electric Power Plant Siting Law, Section 403.501-403.519, F.S., and amendments thereto.

XII. MODIFICATION OF CONDITIONS

A. The Department may modify the provisions of the special conditions dealing with sampling, monitoring, reporting, and specifications for control equipment or related time schedules as necessary to attain the objectives of Chapter 403, Florida Statutes, upon mutual agreement with the Licensee. Such modifications and agreement shall be in writing. Such modifications will not take effect until after prominent public notice giving a period of thirty (30) days for public review and comment of the Department's intent to modify said special conditions. If requested, the Secretary may provide opportunity for a public hearing on the proposed modifications prior to taking final agency action.

B. For modifications in relation to federally delegated or approved permit programs, if no written objection is raised following notice to the parties and the public pursuant to Section

403.516(1)(b), F.S., the department shall modify a certification order and conditions of certification to conform to any subsequent department-issued amendments, modifications or renewals of any separately-issued prevention of significant deterioration (PSD) permit, Title V Air Operation permit, National Pollutant Discharge Elimination System (NPDES) permit or any other permit for the certified electrical power plant issued by the department under a federally delegated or approved permit program so long as no state rule exists which conflicts or is more stringent than the provisos of the federal permits.

XII. Air

Arvah Hopkins Unit No. 2 shall be operated in accordance with Title V Air Operation Permit No. 0730003-003-AV and Chapters 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.

A. Operation

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

Emission 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 8, 1997.]

{Permitting note: The heat input limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. Regular record keeping is not required for heat input. Instead, the owner or operator is expected to determine heat input whenever emission testing is required, to demonstrate at what percentage of the rated capacity that the unit was tested. Rule 62-297.310(5), F.A.C., included in the permit, requires measurement of the process variables for emission tests. Such heat input determination may be based on measurements of fuel consumption by various methods including but not limited to fuel flow metering or tank drop measurements, using the heat value of the fuel determined by the fuel vendor or the owner or operator, to calculate average hourly heat input during the test.}

2. Emissions Unit Operating Rate Limitation After Testing. See specific condition C.10. [Rule 62-297.310(2), F.A.C.]

3. Methods of Operation.

a. Fuels. The fuels that are allowed to be burned in this boiler are natural gas and/or new No. 2 through No. 6 fuel oil and/or on-specification used oil (See Specific Condition XII.D). In case of a natural gas curtailment, liquefied petroleum gas (LPG) may be used as an igniter fuel for the fuel oil.

b. Other. Fuel additives typically of a magnesium oxide, hydroxide, sulfonate, or calcium nitrate origin may be used.

[Rule 62-213.410, F.A.C.; and, Applicant's request in Title V permit renewal application dated July 1, 2002.]

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 Title V permit renewal application received July 1, 2002.]

B. Emission Limitations and Standards.

1. Visible Emissions. Visible emissions shall not exceed 20 percent opacity, except for one six-minute period per hour during which opacity shall not exceed 27 percent.

[Rule 62-296.405(1)(a), F.A.C.; and applicant request.]

2. 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.]

3. 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.]

4. 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.]

5. 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.]

6. Sulfur Dioxide. For compliance purposes, the following limit supersedes

the limit contained in Condition B.5. 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 XII.B.7. & XII.C.8.)

[Rule 62-204.220 & .240, F.A.C.; AO37-242825 specific condition 4; and, Applicant's request in Title V permit renewal application received July 1, 2002.]

7. 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 XII.B.7. and XII.C.8.)

[Rules 62-4.070(3) & 62-296.405(1)(c)3., F.A.C.; and, Applicant Requests dated June 18, 1997 & July 1, 2002.]

8. 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.

9. 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.]

10. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.

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

11. 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.]

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, NO_x and CO₂.}
[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]}

1. Sulfur Dioxide. The Licensee 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 XII.B.7. and XII.C.8. of these conditions. [Rule 62-296.405(1)(f)1.b., F.A.C.]

2. 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.]

3. 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.]

4. 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 XII.C.5.
[Rule 62-296.405(1)(e)1., F.A.C.]

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

a. 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.

b. 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:

i. 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.

ii. 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.]

6. 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.]

7. 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 Licensee may use the EPA test methods, referenced above, to demonstrate compliance; however, as an alternate sampling procedure authorized by permit, the Licensee elected to demonstrate compliance by using fuel sampling and analysis. See specific conditions B.7. and C.8.

[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.]

8. 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;

i. 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;

ii. by "as-fired" sample results provided by the Licensee.

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, ASTM D5504-94, or equivalent. This record may be maintained either by;

i. 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;

ii. by on-site sample results provided by the Licensee, or;

iii. 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;

i. 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;

ii. by on-site sample results provided by the Licensee, or;

iii. 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 SO₂ 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 Requests dated July 10, 1997 & July 1, 2002]

9. 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.]

10. Operating Rate During Testing.

Testing of emissions shall be conducted with the source operating at permitted capacity. Permitted capacity is defined as 90-100% of the maximum operating rate allowed by this certification. If it is impracticable to test at permitted capacity, then sources may be tested at less than capacity, in this case, subsequent source operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen consecutive days for purposes of additional compliance testing to regain the permitted capacity in the conditions of certification.

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

11. 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 requests dated June 18, 1997 & July 1, 2002.]

12. Calculation of Emission Rate. The indicated emission rate or

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

13. Applicable Test Procedures.

a. Required Sampling Time.

i. 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.

ii. 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:

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

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

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

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

e. Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube. [Rule 62-297.310(4), F.A.C.]

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 3. Check after each test series	Spirometer or calibrated wet test or dry gas test meter	2%
		Comparison check	5%

14. Required Stack Sampling Facilities. When a mass emissions stack test is

required, the Licensee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to permit 0730003-003-AV.

A suitably installed and accessible stack sampling platform as approved by the Department of Environmental Protection will be provided on the Unit No. 2 stack. Stack Sampling tests for particulates shall be performed annually before the end of the federal fiscal year (September 30th) in conformance with Chapter 62-297, F.A.C, and in conformance with DEP methods or EPA methods 1, 2, 3, and 5 or 17 or as otherwise approved by the Department. In accordance with Rule 62-297.310(7)(a)5., F.A.C., no particulate or visible emission tests shall be required in any federal fiscal year in which the fossil fuel steam generator did not burn fuel oil for more than 400 hours other than during startup. Results of the stack tests shall be submitted to the Northwest District Office of the Department within 45 days after completion of the tests. The City of Tallahassee shall notify the Department at least 15 days prior to the stack test to allow witnessing, whenever possible, of the test. The Department may waive the 15-day notice requirement on a case-by-case basis. [Rule 62-297.310(6), F.A.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.

i. 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.

ii. 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.

iii. 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 (see specific condition C.16.);

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.

iv. 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 (see specific condition C.17.);

v. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

b. Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

c. Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply. [Rule 62-297.310(7), F.A.C.; and, SIP Approved.]

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 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.]

17. Particulate Matter Testing - Annual and Permit Renewal. Annual and permit renewal compliance testing for particulate matter emissions is not required for these emissions units while burning:

- a. only gaseous 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.]

D. Recordkeeping and Reporting Requirements.

1. 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.]

2. 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.]

3. Quarterly Reports. 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.]

4. 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:

- i. The type, location, and designation of the emissions unit tested.
- ii. The facility at which the emissions unit is located.
- iii. The owner or operator of the emissions unit.
- iv. 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.
- v. 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.
- vi. 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.
- vii. 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.
- viii. The date, starting time and duration of each sampling run.
- ix. 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.
- x. The number of points sampled and configuration and location of the sampling plane.
- xi. 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.
- xii. The type, manufacturer and configuration of the sampling equipment used.
- xiii. Data related to the required calibration of the test equipment.

xiv. Data on the identification, processing and weights of all filters used.

xv. Data on the types and amounts of any chemical solutions used.

xvi. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.

xvii. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.

xviii. All measured and calculated data required to be determined by each applicable test procedure for each run.

xix. The detailed calculations for one run that relate the collected data to the calculated emission rate.

xx. 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.

xxi. 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.]

E. Fuel Oil

The sulfur content of fuel oils consumed shall be analyzed and records of such analyses shall be maintained for inspection by the Department. 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:

1. 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

2. 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 calendar year.

3. 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.

4. 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.

5. Testing Requirements: For each batch of used oil to be burned, the owner or operator must be able to demonstrate that the used oil qualifies as on-specification used oil and that the PCB content is less than 50 ppm.

The requirements of this demonstration are governed by the following federal regulations:

Analysis of used oil fuel. A generator, transporter, processor/re-refiner, or burner may determine that used oil that is to be burned for energy recovery meets the fuel specifications of Sec. 279.11 by performing analyses or obtaining copies of analyses or other information documenting that the used oil fuel meets the specifications.
[40 CFR 279.72(a)]

Testing of used oil fuel. Used oil to be burned for energy recovery is presumed to contain quantifiable levels (2 ppm) of PCB unless the marketer obtains analyses (testing) or other information that the used oil fuel does not contain quantifiable levels of PCBs.

a. The person who first claims that a used oil fuel does not contain quantifiable level (2 ppm) PCB must obtain analyses or other information to support that claim.

b. Testing to determine the PCB concentration in used oil may be conducted on individual samples, or in accordance with the testing procedures described in Sec. 761.60(g)(2). However, for purposes of this part, if any PCBs at a concentration of 50 ppm or greater have been added to the container or equipment, then the total container contents must be considered as having a PCB concentration of 50 ppm or greater for purposes of complying with

the disposal requirements of this part.

c. Other information documenting that the used oil fuel does not contain quantifiable levels (2 ppm) of PCBs may consist of either personal, special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the oil contains no detectable PCBs. [40 CFR 761.20(e)(2)]

When testing is required, 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).

In addition to the above requirements, the owner or operator shall sample and analyze each batch of used oil to be burned for the sulfur content (by weight), density and heat content in accordance with approved test methods.

6. 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:

a. The gallons of on-specification used oil placed into inventory to be burned and the gallons of on-specification used oil burned each month.

b. Results of the analyses of each deposit of used oil, as required by the above conditions.

c. Other information, besides testing, used to make a claim that the used oil meets the requirements of on-specification used oil or that the used oil contains less than 50 ppm of PCBs. [40 CFR 279.72(b), 40 CFR 279.74(b) and 40 CFR 761.20(e)]

7. Reporting Requirements: The owner or operator shall submit, with the Annual Operation Report form, the analytical results required above and the total amount of on-specification used oil placed into inventory to be burned 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.]

F. Stack Height

The stack serving Unit No. 2 shall be not less than 250 feet high.

G. Annual Reporting

An annual operation report shall be submitted by the City by March 1 of each year

utilizing DEP Form 62-210.900(5), F.A.C.

XIII. Water

A. Surface Water Discharges

Wastewater discharged from the site shall meet the standards set forth in Chapter 62-302, F.A.C., and any subsequent amendments, unless excepted by variance and NPDES Permit FL0025518. In addition to other treatment processes, the City of Tallahassee may use up to three treatment ponds to meet the standards set forth in Chapter 62-302, F.A.C.

1. The Licensee is authorized to discharge from **Outfall D-0172- Cooling Tower Blowdown** from Cooling Tower 2, into the on-site man made drainage ditch through Outfall D-001 to Beaver Creek.

a. Such discharges shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Daily Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow, MGD	Report	Report	Daily	Integrate or	EFF-2A, EFF-2B
Free Available Chlorine, mg/l	0.2	0.5	Each Application	Multiple Grabs ¹	EFF-2A, EFF-2B
Time of Chlorine Discharge, Minutes/tower/day	N/A	120	Each Application	Logs	EFF-2A, EFF-2B
Total Recoverable Zinc, mg/l	1.0	1.0	1/Quarter	Grab	, EFF-2B
Total Recoverable Chromium, mg/l	0.2	0.2	1/Quarter	Grab	EFF-2B
Total Recoverable Copper, mg/l	Report	Report	1/Quarter	Grab	EFF-2B
pH	NA	XIII.A.1. C	1/month	Grab	EFF-2B

¹ Multiple grabs shall consist of grab samples collected at the approximate beginning of TRC or Spectrus 1300/Clam-trol CT-2 discharge and once every 15 minutes thereafter until the end of TRC or Spectrus 1300/Clam-trol CT-2 discharge. In the event that TRC is not detectable or Spectrus1300/Clam-trol CT-2 is below the no effect level of 0.12mg/l at the time that blowdown is resumed after each application, no further analysis is required. "Daily Average" as it applies to FAC or Spectrus1300/Clam-trol CT-2 means the average of values taken over any individual release period and "Daily maximum" applies to FAC at any time (i.e., during treatment of any cooling tower).

Spectrus 1300 /Clam-trol CT-2	Report	Report	Each Application	Multiple Grabs ¹	EFF-2B
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b. The location of sampling points as specified above are as follows:

Monitoring Location	Description of Monitoring Location
EFF-2B	Cooling tower conveyance pipe prior to mixing with any other waste stream (s) from unit 2.

Multiple grabs shall consist of grab samples collected at the approximate beginning of TRC or Spectrus 1300/Clam-trol CT-2 discharge and once every 15 minutes thereafter until the end of TRC or Spectrus 1300/Clam-trol CT-2 discharge. In the event that TRC is not detectable or Spectrus 1300/Clam-trol CT-2 is below the no effect level of 0.12mg/l at the time that blowdown is resumed after each application, no further analysis is required. "Daily Average" as it applies to FAC or Spectrus 1300/Clam-trol CT-2 means the average of values taken over any individual release period and "Daily maximum" applies to FAC at any time (i.e., during treatment of any cooling tower).

c. The range for pH shall remain within 6.0 to 9.0 SU.

2. Chlorine: Neither free available chlorine (FAC) nor total residual chlorine (TRC) or other Department approved biocide shall be discharged from any tower for more than two hours in any one day and not more than any one tower shall discharge FAC or TRC or other biocide at one time. TRC or biocide monitoring shall be adequate to document compliance with this requirement. Chlorine shall not be used in conjunction with any other biocide during treatment of any one cooling tower.

3. The Licensee needs to provide certification that the 126 priority pollutants (as listed in 40 CFR Section 423, Appendix A) are not being discharged in detectable concentrations in the cooling tower blowdown as a result of addition of any maintenance chemicals. Continued compliance shall be demonstrated by one of the three methods below.

Method 1-sampling at a frequency of not less than once per year for all priority pollutants referenced above with submission of analysis results with each certification.

Method 2-submission of certification (s) from the manufacturer that each product used contains no priority pollutants. Such submission is required only once for each product used, unless subsequent changes in the product formulation occur or the product is obtained from a different source. Certification for all products in use shall be maintained on site.

Method 3-calculations to assure that if priority pollutants are contained in any product(s),

no discharge of any individual priority pollutant can occur at concentrations greater than 10 micrograms per liter due to dilution within the cooling system.

The certification shall be in the following form: "I certify that no priority pollutants in excess of 10ppb are being discharged from any maintenance chemicals added to the cooling towers. Compliance is demonstrated by Method--"

4. The Licensee is authorized to discharge from **Outfall D-013 -LOW VOLUME WASTES**, Including demineralizer waste, boiler blowdown, auxiliary cooling water and floor drains to the on-site man-made drainage ditch through Outfall D-001 Beaver Creek.

a. Such discharge shall be limited and monitored by the permittee as specified below:

EFFLUENT CHARACTERISTIC	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS		
	Daily Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow, MGD	Report	Report	Per discharge	Totalizer	EFF-3
Total Suspended Solids, mg/l	30.0	100.0	1/Day (see XIII.A.4.C)	8-Hr Composite	EFF-3
Oil and Grease, mg/l	15.0	20.0	1/Day (see XIII.A.4.C)	Grab	EFF-3
PH	NA		1/Day (see XIII.A.4.C)	Grab	EFF-3

b. The location of sampling points as specified above are as follows:

Monitoring Location	Description of Monitoring Location
EFF-3	Discharge from treatment pond #2 or #3 (EFF-3) prior to mixing with any other waste stream (s).

c. Monitoring for total suspended solids, oil and grease, and pH is required only during periods of discharge to drainage ditch. The range for pH shall remain within 6.0 to 9.0 SU.

(3) Phosphorus: The effluent shall not contain phosphorus in amounts greater than 1.65 mg/l, as P.

(4) Sulfate: Hydrochloric acid or sulfuric acid or both may be utilized for pH

adjustment and scale control in the cooling tower. Sulfuric acid may be used for resin regeneration and neutralization of the treatment pond effluent. The sulfates as SO_4 in the final combined effluent at the Point of Discharge (POD) shall not exceed 250 mg/l, as SO_4 .

(5) Chloride: Chloride shall not exceed 250 mg/l at the POD.

(6) Deleterious Substances: No organic or inorganic substance which is not specifically described in the application shall be added to the effluent.

(7) Temperature: The instantaneous maximum temperature shall be 85°F during the months of May, June, July, August, and September and shall be 80°F during all other months, the maximum daily average shall be 80°F at all times, calculated as the mean of all temperature readings on a daily (24-hr) basis.

(8) Copper: Compliance with the water quality criteria shall be measured at the boundary of a 330 meter mixing zone extending from the POD.

(9) The permanent use of a copper corrosion inhibitor, such as Betz DE-1213 (Copper-trol Cu-1) or equivalent, is allowed provided:

a. the discharge concentration of the copper corrosion inhibitor does not exceed 20 mg/l at the POD;

b. treatment will not be more frequent than once per two weeks; and

c. treatment of the towers will be separated by at least one week.

B. Monitoring

Water quality monitoring shall be performed at the POD. The program shall be approved by the Department. The purpose of the program shall be to measure those chemical parameters that are determined to be most indicative of the effects of the power plant liquid discharges. The City of Tallahassee may periodically request that the Department review the monitoring program. After such review the Department may authorize a reduction or modification of the following monitoring program:

Name	STORET Code	Reporting Units	Monitoring Point	Frequency
Chlorine, total residual	50060	mg/l	POD	1/M(a)
Oil & Grease	00550	mg/l	POD	1/M
pH, field	00400	pH unit	POD	C(b)
flow rate	50050	mgd	POD	C(b)
Temperature, water	00010	°C	POD	C(b)
Conductivity, adj. to 25°C	00095	micromho	POD	C(b)

Oxygen, dissolved	00300	mg/l O ₂	POD	1/M
Iron, total	01045	µg/l Fe	POD	1/Q
Mercury, total	71900	µg/l Hg	POD	1/Q
Chromium, total	01034	µg/l Cr	POD	1/Q
Copper, total	01042	µg/l Cu	MZ	1/Q(c)
Lead, total	01051	µg/l Pb	POD	1/Q

(a) Measured only during periods of chlorination.

(b) Measured continuously at the POD. Estimate daily average from data collected once every hour, and report daily average, daily high and daily low from that data. Also, through November 30, 1995, ambient temperature of cooling tower makeup water (groundwater) shall be obtained daily and reported monthly. Additionally, the City of Tallahassee shall separately conduct a single, one-day study during the summer months (June-September of 1994 or 1995) to examine the intra-day variations in the groundwater temperature used for cooling tower make-up water. Temperature values shall be collected on an hourly basis for a twenty-four hour period. Results of this one day study shall be submitted with the next Monthly Operation Report immediately following the completion of this one day study, with copies submitted to the Office of Siting Coordination and the Bureau of Water Facilities Planning and Regulation. Groundwater temperature data provided pursuant to this paragraph shall be obtained from a cooling tower make-up production well.

(c) MZ (mixing zone) boundary 330 meters downstream of POD.

Testing procedures may be ASTM procedures, Standard Methods, or other methods, as approved by the Department.

C. Cooling Tower Blowdown

The total discharge from the cooling tower of Unit No. 2 shall not exceed 2.9 cubic feet per second (1,300 gallons per minute). The Licensee shall install and operate a heat exchanger to insure that the cooling tower effluent never exceeds an instantaneous maximum temperature shall be 85°F during the months of May, June, July, August, and September and shall be 80°F during all other months. The maximum daily average shall be 80°F at all times, calculated as the mean of all temperature readings on a daily (24-hr) basis.

3. Ground Water Monitoring

Groundwater shall be monitored for the parameters, and in accordance with the frequency described below. Water samples from the well(s) supplying make-up water to the cooling towers shall be taken concurrently with the water samples taken of the receiving stream. Wells not on line at the time of the sampling of the receiving stream may be sampled at other appropriate time intervals. Data shall be provided to the Department on a quarterly basis for the following:

Measurement	Reporting Units	Frequency
Total Hardness	mg/l CaCO ₃	1/6M
pH	pH units	1/M
M alkalinity	mg/l CaCO ₃	1/6M
Conductivity	micromho	1/M

The monitoring program shall be reviewed every two years by the Department.

4. Archeological Sites

The 231 acre Hopkins site shall be examined by the appropriate archaeological agency of Tallahassee to identify areas of archaeological significance. Subsequently, efforts shall be made to remove, mark or otherwise protect the archeological values. This shall not apply to the area already occupied by structures or the area upon which foundations for the boiler, generator, cooling tower, and stack are to be located.

5. Site Drainage and Erosion Control

a. Provisions shall be made to control sediment runoff during and after construction, utilizing the latest techniques developed by the DOT/DEP. Sediment and oil traps shall be installed and maintained where necessary to achieve the goals of pollution control.

b. A control program shall be established by the applicant to provide periodic review of all construction activities to assure protection of the environment.

c. When new or revised site drainage is undertaken it shall be constructed to minimized the direct effect of runoff from parking areas and other impervious surfaces.

6. Polychlorinated Biphenyl Compounds

There shall be no discharge of polychlorinated biphenyl compounds.

Any party to the this Order has a right to seek judicial review of it pursuant to Section 120.68, Florida Statutes by filing a Notice of Appeal, pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, Tallahassee, Florida 32399-3000, and by filing a copy of the Notice of Appeal, accompanied by the applicable filing fees, with the appropriate District Court of Appeal. The Notice of Appeal must be filed within thirty days from the date this Order is filed with the Clerk of the Department of Environmental Protection.

Executed in Tallahassee, Florida.

Hamilton S. Oven

Hamilton S. Oven, P.E.

Administrator

Siting Coordination Office

cc: All Parties

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

Donise Cunningham
Clerk

11-29-04
Date

cc:

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