

Memorandum

Florida Department of  
Environmental Protection

RECEIVED

FROM: <sup>KAS</sup> Karen Skinner, Siting Coordination Office  
MS 48 487-0472

JUN 19 2000

TO: Doug Fry, Water Facilities, MS 3500  
Raoul Clarke, Waste, MS 4550  
Al Linero, Air Resource Management, MS 5505

BUREAU OF AIR REGULATION

DATE: June 16, 2000

SUBJECT: City of Tallahassee's Arvah B. Hopkins Power Plant Modification  
Request

We have prepared a draft Final Order for this project, which includes not only the changes requested by Tallahassee, but also updates in the rule citations. We believe the citation changes to be accurate, but, as previously arranged, are requesting your verification of the changes. Also, this is the opportunity to suggest any other type of changes to the Hopkins conditions.

Once we have received your comments, and discussed with Tallahassee any alterations necessitated by your comments, we will revise the draft accordingly, and condense those portions which need no changes for the purpose of the Order. The draft Final Order will then be sent to the parties to provide opportunity for objections, and notice will also be published in the Florida Administrative Weekly for the same purpose.

Please submit your comments by July 14th.

KS/ks

**BEFORE THE STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

In Re: City of Tallahassee	)	
Arvah B. Hopkins Power Plant	)	DEP FILE NO. PA 74-03H
Modification of Conditions	)	OGC CASE NO. _____
of Certification	)	
Leon County, Florida	)	
_____	)	

**FINAL ORDER MODIFYING  
CONDITIONS OF CERTIFICATION**

On May 20, 1975, the Florida Pollution Control Board, sitting as the Siting Board, issued a final order approving certification for the City of Tallahassee's Arvah B. Hopkins Generating Station. That certification order approved the construction and operation of an oil-fired/natural gas-fired power plant and associated facilities located in Leon County, Florida. The certification was modified on June 27, 1977, May 30, 1979, October 5, 1984, October 24, 1986, October 21, 1987, June 6, 1990, and May 18, 1994.

On May 12, 2000, the City requested that the Certification be modified to conform the Conditions to Industrial Wastewater Facility Permit No. FL0025518 for the Hopkins Power Plant, which the Department renewed on November 7, 1997. This action requires the Department to make certain modifications to conform the Conditions of Certification for the above referenced facility to the revised Industrial Wastewater Facility permit. In conjunction with the Industrial Wastewater-based changes, the Department also intends to update the rule citations.

Copies of the proposed modifications were made available for public review on May 12, 2000. On \_\_\_\_\_, 2000, a Notice of Intent to Issue Proposed Modification of Power Plant Certification was published in the Florida Administrative Weekly. On \_\_\_\_\_, 2000, all parties to the original proceeding were furnished with a copy of

the Notice of Intent to Issue Proposed Modification of Power Plant Certification and with a copy of the proposed final order. The notices specified that all parties to the original certification proceeding have 45 days from the issuance of the notice by mail to such party's last address of record in which to object to the requested modification. Failure of any of the parties to file a response constitutes a waiver of objection to the requested modification. The notices further specified that any person who is not already a party to the certification proceeding and whose substantial interest is affected by the requested modification has 30 days from the date of publication of the public notice to object in writing. If no objections are received, then a Final Order approving the modification shall be issued by the Department. If objections are raised and agreement cannot be subsequently reached, then pursuant to §403.516(1)(c), F.S., the applicant may file a petition for modification seeking approval for those portions of the request for modification to which written objections were timely filed. No written objections to the proposed modifications have been received by the Department. Accordingly, in the absence of any timely objection,

**IT IS ORDERED:**

The proposed changes to the City of Tallahassee's Hopkins Power Plant Conditions of Certification in accordance with Rule 62-17.211(4), F.A.C., as necessary to conform to Permit No. FL0025518, are APPROVED. Pursuant to Section 403.516(1)(b), F.S., the conditions of certification for the Hopkins Power Plant, are MODIFIED as follows:

**STANDARD**

1. 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.

## 2. Noncompliance Notification

If, for any reason, the City of Tallahassee does not comply with or will be unable to comply with any limitation specified in this certification, the permittee shall notify the appropriate district administrator or subdistrict office of the Department by telephone during the working day that said noncompliance occurs and shall confirm this within forty-eight (48) hours of becoming aware of such condition, and shall supply the following information:

A. a) A description of the discharge and cause of non-compliance; and

B. b) The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time, the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrent of the noncomplying discharge.

## 3. Facilities Operation

The permittee 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 permittee to achieve compliance with the terms and conditions of this certification.

## 4. Adverse Impact

The permittee 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.

5. Right of Entry

The City of Tallahassee shall allow the Secretary of the Department and/or authorized representatives, upon the presentation of credentials:

A. a. To enter upon the permittee's premises where an effluent source is located or in which records are required to be kept under the terms and conditions of this permit; and

B. b. To have access to and copy any records required to be kept under the conditions of this certification; and

C. c. To inspect any monitoring equipment or monitoring method required in this certification and to sample any discharge or pollutants.

6. 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 of Section 403.512, Chapter 403, Florida Statutes.

7. Civil and Criminal Liability

Nothing in this certification shall be construed to preclude the institution of any legal action or relieve the permittee from responsibilities, liabilities, or penalties established pursuant to any applicable State Statutes, or Regulation, including Departmental rules and regulations promulgated by the Department pursuant to Chapter 403, F.S.

8. Property Rights

The issuance of this certification does not convey any property rights in either real or personal property, or 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.

9. 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 provision to other circumstances, and the remainder of the certification shall not be affected thereby.

10. 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-~~403.518~~ 403.519, F.S., and amendments thereto.

11. Legal Action

Nothing in this certification shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable Florida Statute, or regulation, including Departmental rules and regulations promulgated by the Department pursuant to Chapter 403, Florida Statutes.

12. Unforeseen Circumstances

Before engaging in a construction activity which may result in a significant adverse environmental impact that was not evaluated or that is significantly greater than that evaluated in the certification application, the applicant shall provide both telephone and written notification to the Department. This shall include unexpected harmful effects or evidence of irreversible damage, not previously identified.

## SPECIAL

### 1. Air

Arvah Hopkins Unit No. 2 shall be operated in accordance with Chapters 62-210, 62-212, 62-213, 62-296, and 62-297, ~~17-210, 17-212, 17-213, 17-296, and 16-297~~, F.A.C.

#### A. Stack Emissions

Emissions shall be controlled so as not to exceed the appropriate standards specified in Chapter 62-296 ~~17-296~~, F.A.C, and any subsequent amendments, unless excepted by a variance. Emissions of sulfur dioxide from Unit No. 2 shall not exceed 1.4 pounds per million Btu (mmBtu) heat input. Emissions of particulate matter from Unit No. 2 shall not exceed 0.1 pounds per mmBtu heat input when firing fuel oil. No particulate limit shall apply when firing natural gas. The provisions of section 62-210.700 ~~17-210.700~~, F.A.C., regarding excess emissions are applicable to Unit No. 2.

#### B. Stack Height

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

#### C. Conditions for Stack 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.

#### D. Stack Sampling

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~~ 47-297, 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)b.~~ 47-297.310(7)(a)b., 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.

#### E. Equipment

Major equipment changes that will affect air emissions or which may have a substantial environmental impact shall be approved by the Department prior to the placing of orders for equipment or the start of construction. Where deemed necessary,



an environmental assessment on the effect of the change shall be prepared. (An example of a major change is the installation of flue-gas desulfurization equipment, or conversion of facilities to the use of coal). This condition supplements Standard Condition 1.

F. 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.

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(4) ~~17-210.900(4)~~, F.A.C.

2. Water

A. Effluent Standards

Wastewater discharged from the site shall meet the standards set forth in Chapter 62-302 ~~17-302~~, F.A.C., and any subsequent amendments, unless excepted by variance. 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 ~~17-302~~, F.A.C. The following specific limits are identified:

(1) a) pH shall be in accord with Chapter 62-302.530(52)(c) ~~17-302~~, F.A.C.

(2) b) Chlorine: Chlorination shall be conducted in such a manner that a chlorine residual in the effluent at County Road 1585 does not exceed 0.01 mg/l.

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

(4) d) 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<sub>4</sub> in the final combined effluent at the Point of Discharge (POD) shall not exceed 250 mg/l, as SO<sub>4</sub>.

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

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

(7) g) Temperature: The temperature at the point of discharge shall never exceed 80°F. The POD has been determined by the Department to be where effluent from the plant physically leaves the plant site at County Road 1585.

(8) h) Copper: Compliance with the water quality criteria shall be measured at the boundary of an 800 meter mixing zone extending from the POD.

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

a. 1) the discharge concentration of the copper corrosion inhibitor does not exceed 20 mg/l at the POD;

b. 2) treatment will not be more frequent than once per two weeks; and

c. 3) 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)
Phosphorus, total	00665	mg/l P	POD	1/M
Ortho-phosphate, total	70507	mg/l P	POD	1/M
Sulfate, total	00945	mg/l SO <sub>4</sub>	POD	1/M
Solids, total dissolved	70300	mg/l	POD	1/M
Oxygen, dissolved	00300	mg/l O <sub>2</sub>	POD	1/M
Iron, total	01045	ug/l Fe	POD	1/Q
Mercury, total	71900	ug/l Hg	POD	1/Q
Chromium, total	01034	ug/l Cr	POD	1/Q
Copper, total	01042	ug/l Cu	MZ	1/Q(c)

Lead, total	01051	ug/l Pb	POD	1/Q
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(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 800 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 City of Tallahassee shall install and operate a heat exchanger to insure that the cooling tower effluent never exceeds 80 °F at the P.O.D.<sup>1</sup>

<sup>1</sup>The City of Tallahassee shall install and operate the heat exchanger referenced in Special Condition 2.C. by no later than 12 months after the date of this Order {Order date: 5/18/94}. The City of Tallahassee shall notify the Department when the City has installed the heat exchanger. The modified Conditions of Certification related to thermal

discharges and temperature limitations shall be applicable on the 30th day after the City of Tallahassee has filed such notice with the Department.

### 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
Sulfate	mg/l SO <sub>4</sub>	1/M
Chloride	mg/l Cl	1/M
Total Hardness	mg/l CaCo <sub>3</sub>	1/6M
pH	pH units	1/M
M alkalinity	mg/l CaCo <sub>3</sub>	1/6M
Conductivity	micromho	1/M
Solids, Total	mg/l	1/6M

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 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. Provision 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. Delegation - Modification of Special Provisions

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 permittee. 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.

7. Polychlorinated Biphenyl Compounds

There shall be no discharge of polychlorinated biphenyl compounds.

Any party to this Notice has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes (F. S.) by the filing of a Notice of Appeal, pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department Environmental Protection, Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the Notice of Appeal, accompanied by the applicable filing fee, with the appropriate district court of appeal. The Notice of Appeal must be filed within 30 days of the date that this Final Order is filed with the Department of Environmental Protection.

**DONE AND ENTERED** this \_\_\_\_\_ day of \_\_\_\_\_ 2000, in Tallahassee, Florida.

**STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION**

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KIRBY B. GREEN, III  
Douglas Building  
3900 Commonwealth Boulevard  
Tallahassee, Florida 32399-3000  
Telephone: (850) 488-7131

**FILING AND ACKNOWLEDGMENT:**

FILED, on this date, pursuant to  
s.120.52 Florida Statutes, with the

designated Department Clerk,  
receipt of which is hereby acknowledged.

\_\_\_\_\_  
CLERK

\_\_\_\_\_  
DATE

**CERTIFICATE OF SERVICE**

I CERTIFY that a true and correct copy of the foregoing Final Order Modifying  
Conditions of Certification was sent by U.S. Mail or \*Interagency Delivery to:

James S. Alves, Esq.  
Hopping Green Sams & Smith, P.A.  
Post Office Box 6526  
Tallahassee, Florida 32314

**\*Via Interagency Delivery**  
James V. Antista, General Counsel  
Fish & Wildlife Conservation Commission  
Bryant Building  
620 South Meridian Street  
Tallahassee, Florida 32399-1600

**\*Via Interagency Delivery**  
Cari Roth  
General Counsel  
Department Of Community Affairs  
2555 Shumard Oak Boulevard  
Tallahassee, Florida 32399-2100

**Via Interagency Delivery**  
Catherine Bedell, Esq.  
General Counsel  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850

**\*Via Interagency Delivery**  
Sheauching Yu, Assistant General Counsel  
Department Of Transportation  
Haydon Burns Bldg., M.S. 58  
605 Suwannee Street  
Tallahassee, Florida 32399-0450

and by interoffice delivery to:

Bobby Cooley, Director  
DEP Northwest District Office

Hamilton "Buck" Oven, P.E.  
Administrator  
DEP Siting Coordination Office

on this \_\_\_\_ day of \_\_\_\_\_ 2000.

STATE OF FLORIDA DEPARTMENT



OF ENVIRONMENTAL PROTECTION

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SCOTT A. GOORLAND  
Assistant General Counsel  
Florida Bar No. 0066834

Douglas Building, MS 35  
3900 Commonwealth Boulevard  
Tallahassee, Florida 32399-3000  
Telephone: (850) 488-9314