

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

IN RE: SITE CERTIFICATION,)
ARVAH B. HOPKINS GENERATING)
STATION, UNIT 2,) CERTIFICATION NO. PA 74-0386
CITY OF TALLAHASSEE)
_____)

FINAL ORDER MODIFYING
CONDITIONS OF CERTIFICATION

On May 20, 1975, the Florida Pollution Control Board acting 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, steam-electric generating facility and associated facilities to be located in Leon County, Florida.

On June 21, August 16, November 5, and December 16, 1993, the City of Tallahassee filed requests to modify the conditions of certification pursuant to section 403.516(1)(b), Florida Statutes (F.S.). The City of Tallahassee requested that the conditions be modified to approve several recently identified changes to the plant design and operation. These proposed changes include reducing SO₂ emission rates to ensure compliance with applicable ambient air quality standards, revising thermal discharge standards and monitoring requirements to reflect the use of a new heat exchanger, updating statutory and regulatory references, allowing use of corrosion control inhibitors, and allowing the use of sulfuric acid for pH

adjustment. The City of Tallahassee submitted revised language for the conditions of certification to address the proposed changes.

On April 8, 1994, Notice of Proposed Modification of Power Plant Certification regarding the proposed modifications was published in the Florida Administrative Weekly. As of April 1, 1994, all of the parties to the original proceeding had received copies of the intent to modify. The notice specified that a hearing would be held if a party to the original certification hearing objects within 45 days from receipt of the proposed notice of modification or if a person whose substantial interests will be affected by the proposed modification objects in writing within 30 days after issuance of the public notice. Written objections to the proposed modifications were not received and a hearing was not requested.

Accordingly, in the absence of any dispute,
IT IS ORDERED THAT:

The proposed changes to the Hopkins Generating Station described in the June 21, August 16, November 5, and December 16, 1993, requests for modification, are approved based on the absence of any written objections. The Department hereby approves the requested modifications, and, pursuant to section 403.516(1)(b), F.S., the Department hereby modifies the conditions of certification for the Arvah B. Hopkins Generating Station as follows:

Special Conditions

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

A. Stack Emissions - Emissions shall be controlled so as not to exceed the appropriate standards specified in Chapter 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 Rule 17-210.700, F.A.C., regarding excess emissions are applicable to Unit No 2.

B. (No change.)

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. ~~Stack-Monitoring---monitoring-equipment-as~~

~~approved-by-the-Department-of-Environmental-Regulation-shall-be
provided-and-operated-on-the-unit-2-stack-in-accordance-with
Section-17-2-7107-F.A.C.~~

D. Stack Sampling - A suitably installed and accessible stack sampling platform as approved by the Department of Environmental Protection Regulation 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) December in conformance Chapter 17-297 17-2-700, F.A.C., and in conformance with DER methods or EPA Methods 1, 2, 3, and 5 or 17 or as otherwise approved by the Department. In accordance with Rule 17-297.340(1)(c)2., 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 whenever possible, 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 - (No change.)

~~F.---Any-ambient-air-quality-monitoring-data-collected-by
the-City-may-be-reported-to-the-Department---Data-from-such
samples-collected-every-sixth-day-and-reported-to-the
Department-should-be-submitted-on-a-monthly-basis-utilizing-the~~

SARGAD-format-

G 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.

H G. Annual Reporting - An annual operation report shall be submitted by the City by March 1 of each year utilizing DER Form 17-210.900(4), F.A.C. 17-1-122(44)-

2. Water

A. Effluent Standards - Wastewater discharged from the site shall meet the standards set forth in Chapter 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 17-302, F.A.C. The following specific limits are identified:

- a) pH shall be in accord with Chapter 17-302, F.A.C.
- b) Chlorine: Chlorination shall be conducted in such a manner that a chlorine residual in the effluent at County Road 1585 260 does not exceed 0.01 mg/l.
- c) Phosphorus: The effluent shall not contain phosphorus in amounts greater than 1.65 mg/l, as P₇ ~~for the first-year-of-operation.--This-phosphorus-limitation-may-be continued-or-reduced-by-the-Department-to-0.33-mg/l,--as-P₇ based-upon-results-of-monitoring-data-provided-to-the Department-by-the-applicant-concerning-the-effects-of-this phosphorus-on-the-receiving-waters.~~
- 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 SO₄ in the final combined effluent at the Point of Discharge (POD) shall not exceed 250 mg/l, as SO₄ in-amounts greater-than-a-six-fold-concentration-of-sulfate-naturally occurring-in-well-water,-but-not-to-exceed-250-mg/l,-as-SO₄. Should-the-applicant-provide-scientific-data-which-demonstrates to-the-satisfaction-of-the-Department-that-sulfate-will-not degrade-the-receiving-waters,-sulfuric-acid-may-then-be-used for-scale-control-and-pH-adjustment-upon-approval-by-the Department.---The-Department-shall-provide-public-notice,-a 30-day-period-for-the-submittal-of-public-comments,-and-a public-hearing-if-requested,-prior-to-any-approval-by-the Department-of-said-sulfuric-acid-for-scale-control-and-pH adjustment-in-the-cooling-tower-

e) (No change.)

f) (No change.)

g) Temperature: The temperature at the point of discharge shall never exceed 80°F. meet-the-requirements-of paragraph-17-3-05(3)(d)(i)-F.A.C. The POD has been determined by the Department to be where effluent from the plant physically leaves the plant site at County Road 1585 260.

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

i) The permanent use of a copper corrosion inhibitor.

such as Betz DE-1213 (Copper-trol Cu-1) or equivalent, is allowed provided:

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

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

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

B. Monitoring - Water quality monitoring shall be performed at the POD on-the-receiving-stream, Ochlockonee River-and-Lake-Talquin. The program shall be approved by the Department. The purpose of the program shall be to measure those chemical and-biological parameters that are determined to be most indicative of the effects of the power plant liquid discharges. Included-shall-be-sampling-in-the-receiving-waters mentioned-here, on-the-basis-specified-by-the-attached biological-monitoring-programs. The City of Tallahassee permittee may periodically request that the Department review the monitoring programs. After such review the Department may authorize a reduction or modification of the these monitoring programs. Refer-to-attached-Figure-1-for-station-descriptions. (Figure 1 deleted.)

1- Biological-Monitoring-Program

<u>Parameter</u>	<u>Station-No.</u>	<u>No.-Relicates and-Frequency</u>
Phytoplankton-(1)	2	2/0
Benthic-Macroinvertebrates-(2)	2	3/0

(1)--Phytoplankton---counts-and-identification

(2)--Benthic-Macroinvertebrates---counts-and-identification

(3)--Periphyton---counts-and-identification

1. 2- Chemical and Physical Monitoring Program*

Name Measurement	STORET Code	Reporting Units	Monitoring Point Station Numbers	Frequency
Chlorine, total residual	50060	mg/l	POD ±	1/M(a)
Oil and 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)
pH, field-----	00400-----	pH-unit-----	2-----	1/M
Temperature, water--	00010-----	°C-----	2-----	1/M
Conductivity,-----	00095-----	micromho-----	2-----	1/M
adj.-to-25°				
Phosphorus, total	00665	mg/l P	POD ± 2	1/M
Orthophosphate, total	70507	mg/l P	POD ± +2	1/M
Sulfate, total	00945	mg/l SO ₄	POD ±,2	1/M
Sulfide, total-----	00745-----	mg/l-S-----	2-----	1/M
Chloride, total	00940	mg/l Cl	POD ±,2	1/M
Solids, total dissolved	70300	mg/l	POD ±	1/M

<u>Name Measurement</u>	<u>STORET</u> Code	<u>Reporting</u> Units	<u>Monitoring Point</u> Station Numbers	<u>Frequency</u>
Oxygen, dissolved	00300	mg/l O2	<u>POD</u> ± 2	1/M
Iron, total	01045	ug/l Fe	<u>POD</u> ±	1/Q
Mercury, total	71900	ug/l Hg	<u>POD</u> ±	1/Q
Chromium, total	01034	ug/l Hg <u>Cr</u>	<u>POD</u> ±	1/Q
Copper, total	01042	ug/l Cu	<u>MZ</u> ±	1/Q(c)
Lead, total	01051	ug/l Pb	<u>POD</u> ±	1/Q

*-Substantially-revised

a) (No change.)

b) Measured continuously at the POD Station-No--1.

Estimate daily average from data collected once every hour
record, and report daily average, daily high and7 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 2-3 cubic feet per second (1,300 ±000 gallons per minute) ~~and shall be from the cold-side.~~ The City of Tallahassee shall install and operate a heat exchanger to insure that the cooling tower effluent never exceeds 80°F at the POD.¹

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

1. 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. 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.

intervals. Data shall be provided to the Department~~7-and-the~~
~~Northwest-Florida-Water-Management-District~~ on a quarterly basis
for the following:

MEASUREMENT	REPORTING UNITS	FREQUENCY
Sulfate	mg/l SO ₄	1/M
Chloride	mg/l Cl	1/M
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 Total
Solids, <u>Total</u>	mg/l	1/6M

The monitoring program shall be reviewed every two years by
~~with-the~~ Department ~~and-submitted-to-the-Northwest-Florida-Water~~
~~Management-District-for-concurrence.~~

4. (No change.)

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 BER. ~~The-environmental control-ordinances-of-the-City-of-Tallahassee-shall-be-complied with-~~ Sediment and oil traps shall be installed and maintained where necessary to achieve the goals of pollution control.

B. (No change.)

C. (No change.)

6. (No change.)

7. (No change.)

Standard Conditions

1. (No change.)
2. Noncompliance Notification

If, for any reason, the City of Tallahassee ~~permitt~~ee does not comply with or will be unable to comply with any limitation specified in this certification, the permittee shall notify the appropriate district regional administrator or subdistrict subregional office of the Department

- 3-4. (No change.)
5. Right of Entry

The City of Tallahassee ~~permitt~~ee shall allow the ~~Director~~ Secretary of the Florida Department of ~~Pollution-Control~~ and/or authorized representatives, upon the presentation of credentials: . . .

- 6-9. (No change.)
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, Sections 403.501 - 403.5195 and amendments thereto.

11. (No change.)
12. (No change.)

NOTICE OF RIGHTS

Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of 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, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy of the Notice of Appeal, accompanied by the applicable filing fees, with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date that the Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this 10th day of May, 1994 in Tallahassee, Florida.

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to S120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

[Signature] Clerk 5/18/94 Date

**STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION**

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CERTIFICATE OF SERVICE

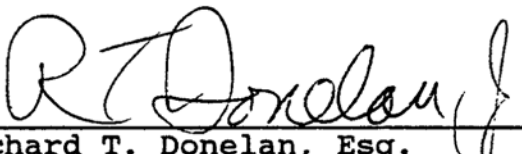
I HEREBY CERTIFY that a copy of the foregoing was sent by U.S.
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