

50-259/260/296

NRC DISTRIBUTION FOR PART 50 DOCKET MATERIAL

FILE NUMBER

ENVIRO

TO: Mr. Victor Stello

FROM: U.S. Environ. Protection Agency
Atlanta, Ga.
Charles H. Kaplan

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ENCLOSURE

National Pollutant Discharge Elimination
System permit.....

(1/8")

PLANT NAME:

Browns Ferry 1-2-3
RJL 7/15/77

SAFETY		FOR ACTION/INFORMATION		ENVIRONMENTAL	
ASSIGNED AD:		ASSIGNED AD:	V. MOORE (LTR)		
BRANCH CHIEF:	Schwencer (6)	BRANCH CHIEF:			
PROJECT MANAGER:		PROJECT MANAGER:			
LICENSING ASSISTANT:		LICENSING ASSISTANT:			
			B. HARLESS		
INTERNAL DISTRIBUTION					
REG FILES	SYSTEMS SAFETY	PLANT SYSTEMS		SITE SAFETY &	
NRG PDR	HEINEMAN	TEDESCO		ENVIRON ANALYSIS	
T & E (2)	SCHROEDER	BENAROYA		DENTON & MULLER	
OELD		LAINAS		CRUTCHFIELD	
GOSSICK & STAFF	ENGINEERING	IPPOLITO			
HANAHER	KNIGHT	F. ROSA		ENVIRO TECH.	
MTPC	POSNAK			ERNST	
CASE	SIHWELL	OPERATING REACTORS		BALLARD	
BOYD	PAWLICKI	STELLO		YOUNGBLOOD	
		EISENHUT			
PROJECT MANAGEMENT	REACTOR SAFETY	SHAO		SITE TECH.	
SKOVHOLT	ROSS	BAER			
P. COLLINS	NOVAK	BUTLER		GAMMILL (2)	
HOUSTON	ROSZTGCZY	GRIMES			
MELTZ	CHECK			SITE ANALYSIS	
HELTEMES				VOLLMER	
SK	AT&I			BUNCH	
	SALTZMAN			J. COLLINS	
	RUTBERG			KREGER	
EXTERNAL DISTRIBUTION				CONTROL NUMBER	
LPDR: Athens, A1					
TIC	NSIC				
NAT LAB					
REG IV (J. HANCHETT)					
66 CYS ACRS SENT CATEGORY					

771960240

REVOLUTION



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET
ATLANTA, GEORGIA 30308

JUL 7 1977

Mr. Victor Stello, Director
Division of Operating Reactors
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Regulatory Docket File

50-259/260/296

Re: Browns Ferry Nuclear Plant
NPDES Permit No. AL0022080

Dear Mr. Stello:

Enclosed is a copy of the National Pollutant Discharge Elimination System permit which was issued for the above referenced facility on June 30, 1977. The permit becomes effective on August 15, 1977. If you have any questions, do not hesitate to contact me at FTS 257-2328.

Sincerely,

Charles H. Kaplan
Charles H. Kaplan
Coordinator
Thermal Analysis Unit

Enclosure

cc: Mr. Voss Moore
U.S. Nuclear Regulatory Commission
w/enclosure

Dr. Peter Krenkel
Tennessee Valley Authority



771960240

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Water Pollution Control Act, as amended, (33 U.S.C. 1251 et. seq; the "Act"),

Tennessee Valley Authority
268-401 BLDG
Chattanooga, Tennessee, 37401

is authorized to discharge from a facility located at

Browns Ferry Nuclear Plant
Athens, Alabama

to receiving waters named Tennessee River
from discharge points enumerated herein, as serial numbers 001, 002, 003, 004, 005, 006
007, 008, 009, 010, 011, 012, 013, 014, 015, 016, 017, and 018

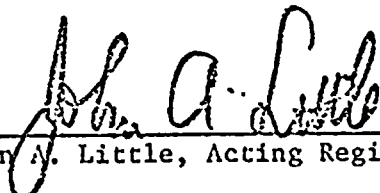
during the effective period of this permit

in accordance with effluent limitations, monitoring requirements and other conditions set forth in Parts I, II, and III hereof.

This permit shall become effective on August 15, 1977.

This permit and the authorization to discharge shall expire at midnight, August 14, 1982. Permittee shall not discharge after the above date of expiration without prior authorization. In order to receive authorization to discharge beyond the above date of expiration, the permittee shall submit such information, forms, and fees as are required by the Agency authorized to issue NPDES permits no later than 180 days prior to the above date of expiration.

Signed this 30th day of June 1977


John A. Little, Acting Regional Administrator

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on effective date and lasting through expiration the permittee is authorized to discharge from outfall(s) serial number(s) 001 - Multiple mode condenser cooling water

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>	<u>Monitoring Requirements</u>	
	<u>Instantaneous Maximum</u>	<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow-m ³ /Day (MGD)	N/A	Continuous	Recorder or pump logs
Intake and Discharge Temperatures °C(°F)	N/A	Continuous	Recorders
Temperature Rise °C(°F)	See Below	Continuous	Tape Recorder
Maximum Temperature °C(°F)	See Below	Continuous	Tape Recorder
Free available chlorine (mg/l)	See Below	1/week <u>1</u> /	Multiple grabs
Total residual chlorine (mg/l)	See Below	1/week <u>1</u> /	Multiple grabs

The reservoir water temperature at the 5-foot depth at the downstream control point shall not exceed the water temperature measured at the 5-foot depth of the upstream control monitor by more than 2.8°C(5°F) nor shall the reservoir water temperature measured at the 5-foot depth at the downstream control point exceed 30.0°C(86°F) due to the discharge of the condenser cooling water. Three monitors located in a line across the reservoir at about river mile 292.5 shall serve as primary downstream control. A minimum of one downstream monitor will be operable at all times to serve as a downstream control monitor. Two monitors located above the plant, one at about river mile 297.6 and a second located in this vicinity, shall be used to provide the upstream water temperature data. In the event the system described is out of service, an alternate method will be employed to measure water temperature one time/day at a five-foot depth at river miles 297.6 and 292.5 in order to determine the temperature rise and maximum river water temperatures. Monitoring in the alternate method shall not be applicable when unsafe boating conditions occur.

During periods of closed-cycle cooling tower operation permittee shall minimize discharge of blowdown and waste heat to the extent practicable, especially during periods when ambient temperatures in the Tennessee River approach or exceed 30°C(86°F), including, but not limited to (1) increasing cycles of concentration and (2) discharge of blowdown during daily periods of minimum water temperature. Annual reports showing conformance with this requirement shall be submitted by December 31 of each year.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/week on a grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

CONTINUED

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on effective date and lasting through expiration the permittee is authorized to discharge from outfall(s) serial number(s) 001 - Multiple mode condenser cooling water (Continued)

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

After July 1, 1977, free available chlorine shall not exceed an average concentration of 0.2 mg/l and a maximum instantaneous concentration of 0.5 mg/l at the outlet corresponding to an individual unit. Neither free available chlorine nor total residual chlorine may be discharged from any unit for more than two hours in any one day and not more than one unit may discharge free available or total residual chlorine at any one time unless the permittee can demonstrate to the Regional Administrator that the unit(s) cannot operate at or below this level of chlorination. Requirements of this paragraph shall not be applicable until the permittee institutes use of chlorination in the condenser cooling water system or cooling towers (See Part III.G.)

Notwithstanding the above requirements, continuous chlorination of auxiliary raw cooling water and fire protection system(s) at a maximum concentration of 0.5 mg/l of free available chlorine for no more than two, three-week periods per year is permitted for the purpose of asiatic clam control, provided that no detectable residual chlorine is discharged to the Tennessee River from this source. Additionally, continuous chlorination of the emergency equipment cooling water system at a maximum concentration of 0.8 mg/l of total residual chlorine for the purpose of asiatic clam control is permitted when the system is operating at intake temperatures above 15.6°C (60°F).

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Outlet corresponding to an individual unit or cooling tower discharge(s) as applicable, prior to mixing with other waste streams, except as noted above.

- 1/ Should the permittee institute use of chlorine in the condenser cooling water system, the Regional Administrator shall be notified not less than 60 days prior to addition. Proposed chlorination procedures, discharge concentrations, and monitoring shall be included with notification. During the first two month period of chlorine application, analyses shall follow each application of chlorine until sufficient operating experience has been obtained to assure conformance with limitations and then analysis frequency may be reduced to one day per week.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on effective date and lasting through expiration the permittee is authorized to discharge from outfall serial number(s) 002 - Intake Screen Backwash

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

Discharge is permitted without limitation or monitoring requirements.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on effective date and lasting through expiration the permittee is authorized to discharge from outfall serial number(s) 003 - Residual heat removal service water

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>	<u>Monitoring Requirements</u>	
		Measurement Frequency	Sample Type
Flow-m ³ /Day (MGD)	N/A	1/week	Estimate
Temperature °C(°F)	N/A	1/day	Grab
Total Chlorine Residual (mg/l)	See Below	1/week	Multiple grabs
Total Available Chlorine (mg/l)	See Below	1/week	Multiple grabs

Mixing zone requirements indicated for serial number 001 shall also be applicable to this discharge.

Continuous chlorination of this system at a maximum concentration of 0.8 mg/l of total residual chlorine for the purpose of asiatic clam control is permitted when the system is operating at intake temperatures above 15.6°C(60°F).

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Residual heat removal service water discharge prior to release to the Tennessee River.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on effective date and lasting through expiration the permittee is authorized to discharge from outfall serial number(s) 004 - Once-through cooling water from research greenhouse discharged via ditch to the Tennessee River

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

Discharge is permitted without limitation or monitoring requirements.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on effective date and lasting through expiration the permittee is authorized to discharge from outfall(s) serial number(s) 005 - Sedimentation Pond (receives low volume wastes) and Biothermal Research Facility Discharge. Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	kg/day (lbs/day)		Other Units		Measurement Frequency	Sample Type
	Daily Avg	Daily Max	Daily Avg	Daily Max		
Flow—m ³ /Day (MGD)	N/A	N/A	N/A	N/A	1/week	Grab
Oil and Grease	5.7(12.5)	21.2(46.7)	15	20	1/week	Grab
Total Suspended Solids	11.4(25.0)	106(234)	30	100	1/week	Grab

Low volume waste sources shall mean taken collectively as if from one source, waste water from all sources except those for which specific limitations are otherwise required in this permit, including, but not limited to waste waters from wet scrubber air pollution control systems, ion exchange water treatment systems, water treatment evaporator blowdown, laboratory and sampling streams, floor drainage, cooling tower basin cleaning wastes and blowdown from recirculating house service water systems.

Discharge of heat from the biothermal research facility is permitted without limitation or monitoring requirements.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/week on a grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

Sedimentation pond discharge prior to mixing with any other waste stream.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on effective date and lasting through expiration the permittee is authorized to discharge from outfall(s) serial number(s) 006 1/ - Sewage Treatment Plant Effluent (two units in parallel are provided)

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

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	kg/day (lbs/day)		Other Units (mg/l)		Measurement Frequency	Sample Type
	Daily Avg	7-Day Average	Daily Avg	7-Day Average		
Flow—m ³ /Day (MGD)	N/A	N/A	42(.011)		1/ week	Grab
BOD ₅	1.2(2.8)	1.9(4.1)	30	45	1/month	Grab <u>2/</u>
Total Suspended Solids	1.2(2.8)	1.9(4.1)	30	45	1/month	Grab <u>2/</u>
Settleable Solids (ml/l)	N/A	N/A	1.0	1.0	1/day	Grab
Chlorine Residual	N/A	N/A	N/A	N/A	1/day	Grab
Fecal Coliform <u>3/</u> (organisms/100 ml)	N/A	N/A	200	400	1/quarter	Grab

In addition to the specified limits, the daily average effluent BOD₅ and suspended solids concentrations shall not exceed 15 percent of the respective daily average influent concentrations.

Effluent shall be aerobic at all times.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/week.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): combined sewage treatment plant effluent prior to mixing with any other waste stream.

1/ Serial number assigned for monitoring and identification purposes.

2/ Influent and effluent.

3/ Geometric mean.

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Permit No. AL0022080

PART I

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning effective date and lasting through expiration the permittee is authorized to discharge from outfall (s) serial number (s) 007 1/ - Radwaste System

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

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>		<u>Monitoring Requirements</u>	
	Daily Average	Daily Maximum	Measurement Frequency	Sample Type
Oil and Grease (mg/l)	15	20	1/ batch	Grab
Total Suspended Solids (mg/l)	30	100	1/ batch	Grab

Compliance with U.S. Nuclear Regulatory Commission requirements for the radioactive component of this discharge will be deemed to constitute compliance with this permit. However, permittee shall submit to EPA and State Director one copy of all routine liquid effluent and water quality monitoring reports submitted to NRC. Such reports may be submitted quarterly with other monitoring reports required by this permit.

In the event that metal cleaning wastes, as defined in Federal Register, Volume 39, No. 196, October 8, 1974, are discharged to the Radwaste System, treatment shall be equivalent to that required for metal cleaning wastes in the above regulations.

1/ Serial number assigned for monitoring and identification purposes.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

2. During the period beginning on effective date and lasting through expiration the permittee is authorized to discharge from outfall(s) serial number(s) 003, 009, and 010 1/ - Station Sumps (receives low volume wastes) Units 1, 2 or 3
Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	kg/day (lbs/day)		Other Units		Measurement Frequency	Sample Type
	Daily Avg	Daily Max	Daily Avg	Daily Max		
Flow—m ³ /Day (MGD)	N/A	N/A	N/A	N/A	2 /week	Grab or pump logs
Oil and Grease	33 (73) <u>2/</u>	76 (170) <u>2/</u>	15	20	2 /week	Grab
Total Suspended Solids	66 (150) <u>2/</u>	380 (840) <u>2/</u>	30	100	2 /week	3-grab composite

Low volume waste sources shall mean taken collectively as if from one source, waste water from all sources except those for which specific limitations are otherwise required in this permit, including, but not limited to waste waters from wet scrubber air pollution control systems, ion exchange water treatment systems, water treatment evaporator blowdown, laboratory and sampling streams, floor drainage, cooling tower basin cleaning wastes and blowdown from recirculating house service water systems.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/week on a grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
Station sumps discharge prior to mixing with any other waste stream.

1/ Serial number assigned for monitoring and identification purposes.

2/ Limitations and monitoring requirements are applicable to each unit separately.



A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on effective date and lasting through expiration the permittee is authorized to discharge from outfall(s) serial number(s) 011 1/CCW Pump Station, 012 1/ Condenser Tube Pulling Area Sump, 013 1/ Office Building Drain, and 014 1/ Control Building Drains Such discharges shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Discharge Limitations				Monitoring Requirements	
	kg/day (lbs/day)		Other Units (mg/l)		Measurement Frequency	Sample Type
	Daily Avg	Daily Max	Daily Avg	Daily Max		
Flow—m ³ /Day (MGD)	N/A	N/A	N/A	N/A	2/week	Grab
Oil and Grease	0.57(1.3) <u>2</u> /	2.3(5.0) <u>2</u> /	15	20	2/week	Grab
Total Suspended Solids	1.1(2.5) <u>2</u> /	11.4(25.0) <u>2</u> /	30	100	2/week	Grab

1/ Serial number assigned for identification and monitoring purposes.

2/ Limitations are applicable to each serial number individually.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/week on a grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
Individual discharges prior to mixing with any other waste stream.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on effective date and lasting through expiration the permittee is authorized to discharge from outfall(s) serial number(s) 015 1/ and 016 1/ Diesel Generation Building Sumps (One in each of two buildings) and 017 1/ Hypochlorination Building Drains. Such discharges shall be limited and monitored by the permittee as specified below:

<u>Effluent Characteristic</u>	<u>Discharge Limitations</u>				<u>Monitoring Requirements</u>	
	kg/day (lbs/day)		Other Units (mg/l)		Measurement Frequency	Sample Type
	Daily Avg	Daily Max	Daily Avg	Daily Max		
Flow—m ³ /Day (MGD)	N/A	N/A	N/A	N/A	2/week	Grab
Oil and Grease	8.5(18.8)	22.7(50.1)	15	20	2/week	Grab
Total Suspended Solids	17.0(37.6)	114(250)	30	100	2/week	Grab

1/ Serial number assigned for identification and monitoring purposes.

2/ Limitations are applicable to each serial number individually.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored 1/week on a grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):
Individual discharges prior to mixing with any other waste stream.

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on effective date and lasting through expiration the permittee is authorized to discharge from outfall(s) serial number(s) 018 1/ - Point source(s) runoff from construction

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

<u>Effluent Characteristics</u>	<u>Discharge Limitations</u> <u>Instantaneous Maximum</u>	<u>Monitoring Requirements</u>	
		<u>Measurement Frequency</u>	<u>Sample Type</u>
Flow-m ³ /Day (MGD)	N/A	1/month <u>3/</u>	Grab
Total Suspended Solids (mg/l)	<u>2/</u>	1/month <u>3/</u>	Grab

- 1/ Serial number assigned for monitoring and identification purposes.
- 2/ Pending repromulgation of effluent guidelines for this waste category, limitations on total suspended solids shall not be applicable. Within 90 days of repromulgation, permittee shall submit a proposed implementation schedule and shall expeditiously complete necessary facilities, if any, to assure compliance with such repromulgated regulations. In the interim, construction practices and control of site runoff shall be consistent with sound engineering practices such as those contained in "Guidelines for Erosion and Sediment Control Planning and Implementation," EPA-R2-72-015 (August, 1972) or "Processes, Procedures and Methods to Control Pollution Resulting from all Construction Activity," EPA-430/9-73-007 (October, 1973). Where an impoundment is utilized by permittee, it shall be capable of containing a 10-year, 24-hour rainfall event.
- 3/ Only applicable during periods of actual discharge. However, sampling will be supplemented by sufficient additional determinations to reflect effluent conditions when rainfall exceeds 0.3 inch per hour or 1 inch per 24 hours.

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored each time the pond is sampled for suspended solids.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s): Point(s) of discharge from treatment system prior to mixing with other waste streams.

B. SCHEDULE OF COMPLIANCE

1. The permittee shall achieve compliance with the effluent limitations specified for discharges in accordance with the following schedule:

- a. Waste Treatment Facilities
 - (1) Achieve operational level - effective date
- b. 316(b) Report - 1/31/78
- c. Blowdown Minimization Report - Annually by 12/31
- d. Chlorination Report - one year after chlorination system startup.

2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.
-

C. MONITORING AND REPORTING

1. *Representative Sampling*

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. *Reporting*

Monitoring results obtained during the previous 3 months shall be summarized for each month and reported on a Discharge Monitoring Report Form (EPA No. 3320-1), postmarked no later than the 28th day of the month following the completed reporting period. The first report is due on October 28, 1977. Duplicate signed copies of these, and all other reports required herein, shall be submitted to the Regional Administrator and the State at the following addresses:

Regional Administrator
Environmental Protection Agency
345 Courtland Street, N.E.
Atlanta, Georgia 30308

Alabama Water Improvement Commission
749 State Office Building
Montgomery, Alabama 36104
205/269-7971

3. *Definitions*

- a. The "daily average" concentration means the arithmetic average (weighted by flow) of all the daily determinations of concentration made during a calendar month. Daily determinations of concentration made using a composite sample shall be the concentration of the composite sample. When grab samples are used, the daily determination of concentration shall be the arithmetic average (weighted by flow) of all the samples collected during that calendar day.
- b. The "daily maximum" concentration means the daily determination of concentration for any calendar day.
- c. "Weighted by flow" means the summation of each sample concentration times its respective flow in convenient units divided by the summation of the flow values.
- d. "Nekton" means free swimming aquatic animals whether of freshwater or marine origin.
- e. For the purpose of this permit, a calendar day is defined as any continuous 24-hour period.

PART I

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- f. The "daily average" discharge means the total discharge by weight during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average discharge shall be determined by the summation of all the measured daily discharges by weight divided by the number of days during the calendar month when the measurements were made.
- g. The "daily maximum" discharge means the total discharge by weight during any calendar day.

4. *Test Procedures*

Test procedures for the analysis of pollutants shall conform to regulations published pursuant to Section 304(g) of the Act, under which such procedures may be required.

5. *Recording of Results*

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date, and time of sampling;
- b. The dates the analyses were performed;
- c. The person(s) who performed the analyses;
- d. The analytical techniques or methods used, and
- e. The results of all required analyses.

6. *Additional Monitoring by Permittee*

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report Form (EPA No. 3320-1). Such increased frequency shall also be indicated.

7. *Records Retention*

All records and information resulting from the monitoring activities required by this permit including all records of analyses performed and calibration and maintenance of instrumentation and recordings from continuous monitoring instrumentation shall be retained for a minimum of three (3) years, or longer if requested by the Regional Administrator.

A. MANAGEMENT REQUIREMENTS**1. *Change in Discharge***

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, production increases, or process modifications which will result in new, different, or increased discharges of pollutants must be reported by submission of a new NPDES application or, if such changes will not violate the effluent limitations specified in this permit, by notice to the permit issuing authority of such changes. Following such notice, the permit may be modified to specify and limit any pollutants not previously limited.

2. *Noncompliance Notification*

If, for any reason, the permittee does not comply with or will be unable to comply with any daily maximum effluent limitation specified in this permit, the permittee shall provide the Regional Administrator and the State with the following information, in writing, within five (5) days of becoming aware of such condition:

- a. A description of the discharge and cause of noncompliance; and
- 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 recurrence 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 permit.

4. *Adverse Impact*

The permittee shall take all reasonable steps to minimize any adverse impact to navigable waters resulting from noncompliance with any effluent limitations specified in this permit, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. *Bypassing*

Any diversion from or bypass of facilities necessary to maintain compliance with the terms and conditions of this permit is prohibited, except (i) where unavoidable to prevent loss of life or severe property damage, or (ii) where excessive storm drainage or runoff would damage any facilities necessary for compliance with the effluent limitations and prohibitions of this permit. The permittee shall promptly notify the Regional Administrator and the State in writing of each such diversion or bypass.

PART II

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6. *Removed Substances*

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be disposed of in a manner such as to prevent any pollutant from such materials from entering navigable waters.

7. *Power Failures*

In order to maintain compliance with the effluent limitations and prohibitions of this permit, the permittee shall either:

- a. In accordance with the Schedule of Compliance contained in Part I, provide an alternative power source sufficient to operate the wastewater control facilities;

or, if such alternative power source is not in existence, and no date for its implementation appears in Part I,

- b. Halt, reduce or otherwise control production and/or all discharges upon the reduction, loss, or failure of the primary source of power to the wastewater control facilities.

B. RESPONSIBILITIES

1. *Right of Entry*

The permittee shall allow the Regional Administrator, and/or his authorized representatives, upon the presentation of credentials:

- a. To enter upon the permittee's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this permit; and
- b. At reasonable times to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method required in this permit; and to sample any discharge of pollutants.

2. *Transfer of Ownership or Control*

In the event of any change in control or ownership of facilities from which the authorized discharges emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to the Regional Administrator and the State water pollution control agency.

3. *Availability of Reports*

Except for data determined to be confidential under Section 308 of the Act, all reports prepared in accordance with the terms of this permit shall be available for public

PART II

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inspection at the offices of the State water pollution control agency and the Regional Administrator. As required by the Act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in Section 309 of the Act.

4. *Permit Modification*

After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:

- a. Violation of any terms or conditions of this permit;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

5. *Toxic Pollutants*

Notwithstanding Part II, B-4 above, if a toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the Act for a toxic pollutant which is present in the discharge and such standard or prohibition is more stringent than any limitation for such pollutant in this permit, this permit shall be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee so notified.

6. *Civil and Criminal Liability*

Except as provided in permit conditions on "Bypassing" (Part II, A-5) and "Power Failures" (Part II, A-7), nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

7. *Oil and Hazardous Substance Liability*

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties to which the permittee is or may be subject under Section 311 of the Act.

8. *State Laws*

Nothing in this permit 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 State law or regulation under authority preserved by Section 510 of the Act.

9. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

10. Severability

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

PART III

OTHER REQUIREMENTS

- A. In the event that waste streams from various sources are combined for treatment or discharge, the quantity of each pollutant or pollutant property attributable to each controlled waste source shall not exceed the specified limitation for that waste source.
- B. If the permittee, after monitoring for at least six months, determines that he is consistently meeting the effluent limits contained herein, the permittee may request of the Regional Administrator that the monitoring requirements be reduced to a lesser frequency or be eliminated.
- C. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid. Administrative procedures shall be instituted to (1) maintain a detailed inventory of PCB use, (2) assure engineering design and construction to preclude release of PCB's to the environment, and (3) effectively detect the loss of PCB's from equipment. Detail of such procedures shall be submitted no later than 180 days prior to receipt of PCB containing equipment.
- D. The company shall notify the Regional Administrator in writing not later than sixty (60) days prior to instituting use of any additional biocide or chemical used in cooling systems, other than chlorine, which may be toxic to aquatic life other than those previously reported to the Environmental Protection Agency. Such notification shall include:
 - 1. Name and general composition of biocide or chemical.
 - 2. Frequency of use.
 - 3. Quantities used.
 - 4. Proposed effluent limitations.
 - 5. EPA registration number.

- E. In accordance with Section 316(b) of the Act, the permittee shall continue the approved program to monitor nekton and shellfish impinged on plant intake structures and fish eggs and larvae and other organisms entrained by the cooling water system.

During this study period the permittee is encouraged to experiment with systems, methods or procedures to minimize impingement and entrainment effects. By January 1, 1978, the permittee shall submit a summary report to the Regional Administrator and State Director as to the effects of the present cooling water intake with regard to Section 316(b) of the Act. If significant impingement and entrainment is occurring, this report shall include:

1. An evaluation of facility or procedure modifications, if necessary, to minimize the environmental impact of the cooling water intake,
2. An evaluation of methods to return viable nekton and shellfish collected on the intake screens to ambient temperature water at a point outside the influence of the plant intake and discharge, and
3. Proposed facilities or modifications with attendant implementation schedule(s) for implementing 1 and/or 2 above.

At the conclusion of this study period, subject to opportunity for hearing and review, the permittee shall implement the procedures necessary to minimize any adverse environmental impact associated with the intake structure.

- F. By effective date, permittee shall institute an evaluation of the waste sources which contain high concentrations of oil and grease and by administrative procedure or facility construction shall remove oil and grease from such streams as close to the source as practicable.
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- G. Subsequent to installation of a system for chlorination of the condenser circulating water or cooling tower systems, the permittee shall institute a study of chlorine use minimization and instream monitoring to assure conformance with Alabama Water Quality Standards. Results of this study shall be submitted to the Regional Administrator and State Director no later than one year after chlorination system startup.

