

L. M. Stinson (Mike)
Vice President

**Southern Nuclear
Operating Company, Inc.**
40 Inverness Center Parkway
Post Office Box 1295
Birmingham, Alabama 35201

Tel 205.992.5181
Fax 205.992.0341



Energy to Serve Your WorldSM

NL-05-1512

August 29, 2005

Docket Nos.: 50-348
50-364

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, D. C. 20555-0001

Joseph M. Farley Nuclear Plant
NPDES Permit Renewal

Ladies and Gentlemen:

Enclosed in accordance with Section 3.2 of the Joseph M. Farley Nuclear Plant (FNP) Environmental Protection Plan (Units 1 & 2), Appendix B to Facility Operating License Nos. NPF-2 and NPF-8, is a copy of the package for renewal of the FNP National Pollutant Discharge Elimination System (NPDES) Permit Number AL0024619 submitted to the Alabama Department of Environmental Management.

This letter contains no NRC commitments. If you have any questions, please advise.

Sincerely,

A handwritten signature in black ink, appearing to read "L. M. Stinson".

L. M. Stinson

LMS/LPH/sdl

Enclosure: SNC Letter EV-05-1476, August 24, 2005, RE: NPDES Permit No.
AL0024619

cc: Southern Nuclear Operating Company
Mr. J. T. Gasser, Executive Vice President
Mr. J. R. Johnson, General Manager – Plant Farley
RTYPE: CFA04.054; LC# 14325

U. S. Nuclear Regulatory Commission
Dr. W. D. Travers, Regional Administrator
Mr. R. E. Martin, NRR Project Manager – Farley
Mr. C. A. Patterson, Senior Resident Inspector – Farley

ENCLOSURE
NL-05-1512

Joseph M. Farley Nuclear Plant
NPDES Permit Renewal

SNC Letter EV-05-1476, August 24, 2005,
RE: NPDES Permit No. AL0024619

Southern Nuclear
Operating Company, Inc.
Post Office Box 1295
Birmingham, Alabama 35201-1295
Tel 205.992.5000



Energy to Serve Your World™

File E.01.13
Log: EV-05-1476

August 24, 2005

FEDERAL EXPRESS

Farley Nuclear Plant
NPDES Permit No. AL0024619

Mr. Onis "Trey" Glenn, III, PE, Director
Alabama Department of Environmental Management
1400 Coliseum Boulevard
Montgomery, Alabama 36110-2059
Attention: Industrial Section, Water Division

Dear Mr. Glenn:

Enclosed are three (3) copies of the NPDES Permit renewal application package for Farley Nuclear Plant (FNP). The current permit became effective March 1, 2001, and expires on February 28, 2006. The enclosed renewal package contains the completed ADEM Form 187 and EPA Forms 3510-1, 3510-2C, and 3510-2F. Upon request, Southern Nuclear can provide information pertaining to Section 316(b) of the Clean Water Act for this facility.

A check in the amount of \$9,025.00 is enclosed for payment of the required permit renewal fees per ADEM Administrative Code R.335-1-6. If you have any questions or require additional information regarding the enclosed reapplication package, please contact Greg Elmore at (205) 992-5264.

Sincerely,


J. M. Godfrey, Manager
Environmental Affairs

JMG/GDE:ahl

Enclosure

cc: Sandra Lee (w/ Enclosure)

Mr. Onis "Trey" Glenn, III, PE
Alabama Department of Environmental Management
EV-05-1476
Page 2

bcc: w/o Enclosure:

L. M. Stinson
W. F. Kitchens
J. R. Johnson
M. J. Ajluni
R. A. Livingston
W. A. Sim

w/ Enclosure:

M. K. Darby
FNP Document Control (R-Type G01.029)
SNC Document Management - Farley



Southern Nuclear Operating Company
 Corporate Office
 Post Office Box 1295
 Birmingham, Alabama 35201-1295

AmSouth Bank of Walker County
 Jasper, Alabama 35502

61-373
 622

Check Date: **8/16/2005**

Check Number: **131509**

Pay **Nine Thousand Twenty-Five and 00/100 Dollars**

\$ 9,025.00

To The Order Of **Alabama Department of Environmental Management
 P. O. Box 301463
 Attn: Permits and Services Divisions
 Montgomery, AL 36130-1463**

Kathleen King

Authorized Signature

THE BACK OF THIS DOCUMENT CONTAINS AN ARTIFICIAL WATERMARK

⑈ 131509 ⑈ ⑆062203735⑆ 10011013⑈



Southern Nuclear Operating Company
 Corporate Office
 Post Office Box 1295
 Birmingham, Alabama 35201-1295

Vendor: Alabama Department of Environmental Management
 Check Date: 08/16/2005 Check Number: 131509
 Bank Number: 61-373/622 Check Amount: 9,025.00

Invoice Date	Invoice Number	Invoice Amount	Reference Number	Description
08/11/2005	0508111437	9,025.00	C050816003	NPDES Permit Renewal Fees

Total

9,025.00

Return To

Greg Elmore, Ext. 5264 -- PLEASE DO NOT MAIL

Application for Permit Renewal

NPDES Permit No. AL0024619

Joseph M. Farley Nuclear Power Plant

ADEM Form 187
NPDES Permit Application Supplementary Information

Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619

8. Designated Facility Contact:

Name and Title: Gregory D. Elmore, Senior Engineer

Phone Number: (205) 992-5264

9. Type of Business Entity:

Corporation General Partnership Limited Partnership
 Sole Proprietorship Other (Please Specify) _____

10. Complete this section if the Applicant's business entity is a Corporation

a) Location of Incorporation:

Address: 1209 Orange Street

City: Wilmington State: Delaware Zip: 19801

b) Parent Corporation of Applicant:

Name: Southern Company

Address: 270 Peachtree Street

City: Atlanta State: Georgia Zip: 30303

c) Subsidiary Corporation(s) of Applicant:

Name: N/A

Address: _____

City: _____ State: _____ Zip: _____

d) Corporate Officers:

Name: James Barnie Beasley, President & CEO

Address: P.O. Box 1295

City: Birmingham State: Alabama Zip: 35201-1295

Name: Bentina Chisolm Terry, VP External Affairs, General Counsel, & Corporate Secretary

Address: P.O. Box 1295

City: Birmingham State: Alabama Zip: 35201-1295

e) Agent designated by the corporation for purposes of service:

Name: Bentina Chisolm Terry, VP External Affairs, General Counsel, & Corporate Secretary

Address: P.O. Box 1295

City: Birmingham State: Alabama Zip: 35201-1295

11. Please complete this section if the Applicant's business entity is a Partnership

a) General Partners:

Name: N/A

Address: _____

City: _____ State: _____ Zip: _____

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

12. Please complete this section if the Applicant's business entity is a Proprietorship

a) Proprietor:

Name: N/A

Address: _____

City: _____ State: _____ Zip: _____

13. Permit numbers for Applicant's previously issued NPDES Permits and identification of any other State Environmental Permits presently held by the Applicant or its parent corporation or subsidiary corporations within the State:

<u>Permit Name</u>	<u>Permit Number</u>	<u>Held by</u>
See Attachment 2.		
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

14. Identify all Administrative Complaints, Notices of Violation, Directives, or Administrative Orders, or Litigation concerning water pollution, if any, against the Applicant, its parent corporation or subsidiary corporations within the State within the past five years (attach additional sheets if necessary):

<u>Facility Name</u>	<u>Permit Number</u>	<u>Type of Action</u>	<u>Date of Action</u>
None			

SECTION B – BUSINESS ACTIVITY

1. If your facility conducts or will be conducting any of the processes listed below (regardless of whether they generate wastewater, waste sludge, or hazardous wastes), place a check beside the category of business activity (check all that apply):

Industrial Categories

- | | |
|---|--|
| <input type="checkbox"/> Aluminum Forming | <input type="checkbox"/> Metal Molding and Casting |
| <input type="checkbox"/> Asbestos Manufacturing | <input type="checkbox"/> Metal Products |
| <input type="checkbox"/> Battery Manufacturing | <input type="checkbox"/> Nonferrous Metals Forming |
| <input type="checkbox"/> Can Making | <input type="checkbox"/> Nonferrous Metals Manufacturing |
| <input type="checkbox"/> Canned and Preserved Fruit and Vegetables | <input type="checkbox"/> Oil and Gas Extraction |
| <input type="checkbox"/> Canned and Preserved Seafood | <input type="checkbox"/> Organic Chemicals Manufacturing |
| <input type="checkbox"/> Cement Manufacturing | <input type="checkbox"/> Paint and Ink Formulating |
| <input type="checkbox"/> Centralized Waste Treatment | <input type="checkbox"/> Paving and Roofing Manufacturing |
| <input type="checkbox"/> Carbon Black | <input type="checkbox"/> Pesticides Manufacturing |
| <input type="checkbox"/> Coal Mining | <input type="checkbox"/> Petroleum Refining |
| <input type="checkbox"/> Coil Coating | <input type="checkbox"/> Phosphate Manufacturing |
| <input type="checkbox"/> Copper Forming | <input type="checkbox"/> Photographic |
| <input type="checkbox"/> Electric and Electronic Components Manufacturing | <input type="checkbox"/> Pharmaceutical |
| <input type="checkbox"/> Electroplating | <input type="checkbox"/> Plastic & Synthetic Mat'ls |
| <input type="checkbox"/> Explosives Manufacturing | <input type="checkbox"/> Plastics Processing Manufacturing |
| <input type="checkbox"/> Feedlots | <input type="checkbox"/> Porcelain Enamel |
| <input type="checkbox"/> Ferroalloy Manufacturing | <input type="checkbox"/> Pulp, Paper, and Fiberboard Manufacturing |
| <input type="checkbox"/> Fertilizer Manufacturing | <input type="checkbox"/> Rubber |
| <input type="checkbox"/> Foundries (Metal Molding and Casting) | <input type="checkbox"/> Soap and Detergent Manufacturing |
| <input type="checkbox"/> Glass Manufacturing | <input checked="" type="checkbox"/> Steam and Electric |
| <input type="checkbox"/> Grain Mills | <input type="checkbox"/> Sugar Processing |
| <input type="checkbox"/> Gum and Wood Chemicals Manufacturing | <input type="checkbox"/> Textile Mills |
| <input type="checkbox"/> Inorganic Chemicals | <input type="checkbox"/> Timber Products |
| <input type="checkbox"/> Iron and Steel | <input type="checkbox"/> Transportation Equipment Cleaning |
| <input type="checkbox"/> Leather Tanning and Finishing | <input type="checkbox"/> Waste Combustion |
| <input type="checkbox"/> Metal Finishing | <input type="checkbox"/> Other (specify) _____ |
| <input type="checkbox"/> Meat Products | |

A facility with processes inclusive in these business areas may be covered by Environmental Protection (EPA) categorical standards. These facilities are termed "categorical users".

Process Description	Last 12 Months (gals/day)	Highest Flow Year of Last 5 Years (gals/day)	Average Flow of Last 5 Years (gals/day)	Discharge Type (batch, cont., none)
	Highest Month Avg. Flow	Monthly Avg. Flow	5 Year Avg. Flow	
N/A				

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

- a. Number of batch discharges: N/A per day
- b. Average discharge per batch: _____ (GPD)
- c. Time of batch discharges _____ at _____
(days of week) (hours of day)
- d. Flow rate: _____ gallons/minute
- e. Percent of total discharge: _____

Answer questions 2, 3, and 4 only if you are subject to Categorical Standards.

2. For Categorical Users: Provide the wastewater discharge flows or production (whichever is applicable by the effluent guidelines) for each of your processes or proposed processes. Include the reference number from the process flow schematic (reference Figure 1) that corresponds to each process. [New facilities should provide estimates for each discharge.]

Regulated Process	Applicable Category	Applicable Subpart	Type of Discharge Flow (batch, continuous, none)
See Attachment 3			

Categorical Process	Categorical Production or Flow (e.g., MGD or lbs/day)	Last 12 Months Highest Month	Highest Year of Last 5 Years Monthly Average	Average of Last 5 Years 5 Year Average

Unregulated Process Description	Last 12 Months gals/day Highest Month Avg. Flow	Highest Flow Year of Last 5 Years gals/day Monthly Avg. Flow	Average Flow of Last 5 Years gals/day 5 Year Avg. Flow	Discharge Type (batch, cont., none)
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
Non-Process Discharges (e.g. non-contact cooling water)	Last 12 Months gals/day Highest Month Avg. Flow	Highest Flow Year of Last 5 Years gals/day Monthly Avg. Flow	Average Flow of Last 5 Years gals/day 5 Year Avg. Flow	Discharge Type (batch, cont., none)
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

- a. Number of batch discharges: _____ per day
- b. Average discharge per batch: _____ (GPD)
- c. Time of batch discharges _____ at _____
(days of week) (hours of day)
- d. Flow rate: _____ gallons/minute
- e. Percent of total discharge: _____

3. Do you have, or plan to have, automatic sampling equipment or continuous wastewater flow metering equipment at this facility?

Current:	Flow Metering	Yes <u>X</u>	No <u> </u>	N/A <u> </u>
	Sampling Equipment	Yes <u> </u>	No <u>X</u>	N/A <u> </u>
Planned:	Flow Metering	Yes <u> </u>	No <u>X</u>	N/A <u> </u>
	Sampling Equipment	Yes <u> </u>	No <u>X</u>	N/A <u> </u>

If so, please indicate the present or future location of this equipment on the sewer schematic and describe the equipment below:

N/A

4. Are any process changes or expansions planned during the next three years that could alter wastewater volumes or characteristics? Yes _____ No X (If no, skip Question 5)

Briefly describe these changes and their effects on the wastewater volume and characteristics: (Attach additional sheets if needed.)

N/A

5. List the trade name and chemical composition of all biocides and corrosion inhibitors used:

<u>Trade Name</u>	<u>Chemical Composition</u>
<u>See Attachment 4</u>	_____
_____	_____
_____	_____

For each biocide and/or corrosion inhibitor used, please include the following information:

- (1) 96-hour median tolerance limit data for organisms representative of the biota of the waterway into which the discharge will ultimately reach,
- (2) quantities to be used,
- (3) frequencies of use,
- (4) proposed discharge concentrations, and
- (5) EPA registration number, if applicable

SECTION D – WATER SUPPLY

Water Sources (check as many as are applicable):

- Private Well
- Municipal Water Utility (Specify City): _____
- Surface Water
- Other (Specify): _____

IF MORE THAN ONE WELL OR SURFACE INTAKE, PROVIDE DATA FOR EACH ON AN ATTACHMENT

SEE ATTACHMENT 5 FOR WELL INFORMATION

City: 0 *MGD Well: _____ *MGD Well Depth: _____ Ft. Latitude: _____ Longitude: _____
 Surface Intake: 93.9 *MGD Intake Elevation: 64 Ft. Latitude: 31° 13' 01" Longitude: 85° 05' 58"

Name of Surface Water Source: Chattahoochee River

* MGD = Million Gallons Per Day

SECTION E – WASTE STORAGE AND DISPOSAL INFORMATION

Provide a description of the location of all sites involved in the storage of solids or liquids that could be accidentally discharged to a water of the state, either directly or indirectly via such avenues as storm water drainage, municipal wastewater systems, etc., that are located at the facility for which the NPDES application is being made. Where possible the location should be noted on a map and included with this application:

Description of Waste	Description of Storage Location
<u>See Attachment 6.</u>	_____
_____	_____

Provide a description of the location of the ultimate disposal sites of solid or liquid waste by-products (such as sludges) from any wastewater treatment system located at the facility.

Description of Waste	Quantity (lbs/day)	Disposal Method*
See Attachment 6.		

*Indicate which wastes identified above are disposed of at an off-site treatment facility and which are disposed of on-site. If any wastes are sent to an off-site centralized waste treatment facility, identify the waste and the facility.

SECTION F – COASTAL ZONE INFORMATION

Is the discharge(s) located within 10-foot elevation of Mobile or Baldwin County?
 Yes [] No [X] If yes, then complete items A through M below:

	YES	NO
A. Does the project require new construction?	___	___
B. Will the project be a source of new air emissions?	___	___
C. Does the project involve dredging and/or filling?	___	___
Has the Corps of Engineers (COE) permit been received?	___	___
Corps Project Number _____		
D. Does the project involve wetlands and/or submersed grassbeds?	___	___
E. Are oyster reefs located near the project site? (Include a map showing project and discharge location with respect to oyster reefs)	___	___
E. Does the project involve the siting, construction and operation of an energy facility as defined in ADEM Admin. Code R. 335-8-1-.02(bb)?	___	___
G. Does the project involve shoreline erosion mitigation?	___	___
H. Does the project involve construction on beaches and dunes?	___	___
I. Will the project interfere with public access to coastal waters?	___	___
J. Does the project lie within the 100-year floodplain?	___	___
K. Does the project involve the registration, sale, use, or application of pesticides?	___	___
L. Does the project propose to construct a new well or alter an existing well to pump more than 50 GPD?	___	___
M. Has the applicable permit been obtained?	___	___

SECTION G – ANTI-DEGRADATION EVALUATION

In accordance with 40 CFR 131.12 and the Alabama Department of Environmental Management Administrative Code, Section 335-6-10-.04 for antidegradation, the following information must be provided, if applicable. It is the

applicant's responsibility to demonstrate the social and economic importance of the proposed activity. If further information is required to make this demonstration, attach additional sheets to the application.

1. Is this a new or increased discharge that began after April 3, 1991? Yes [] No [].
If yes, complete question 2 below. If no, do not complete this section.
2. Has an Anti-Degradation Analysis been previously conducted and submitted to the Department for the new or increased discharge referenced in question 1? Yes [] No []. N/A

If no, complete questions A through F below and ADEM forms 311 and 313 (attached). Form 313 must be provided for each alternative considered technically viable. If yes, do not complete this section.

Information required for new or increased discharges to high quality waters:

- A. What environmental or public health problem will the discharger be correcting?
- B. How much will the discharger be increasing employment (at its existing facility or as the result of locating a new facility)?
- C. How much reduction in employment will the discharger be avoiding?
- D. How much additional state or local taxes will the discharger be paying?
- E. What public service to the community will the discharger be providing?
- F. What economic or social benefit will the discharger be providing to the community?

SECTION H – EPA Application Forms

All Applicants must submit EPA permit application forms. More than one application form may be required from a facility depending on the number and types of discharges or outfalls found there. The EPA application forms are found on the Department's website at <http://www.adem.state.al.us/>. The EPA application forms must be submitted in duplicate as follows:

1. All applicants must submit Form 1.
2. Applicants for existing industrial facilities (including manufacturing facilities, commercial facilities, mining activities, and silvicultural activities) that discharge process wastewater must submit Form 2C.
3. Applicants for new industrial facilities that propose to discharge process wastewater must submit Form 2D.
4. Applicants for new and existing industrial facilities that discharge only non-process wastewater (i.e., non-contact cooling water and/or sanitary wastewater) must submit Form 2E.
5. Applicants for new and existing facilities whose discharge is composed entirely of storm water associated with industrial activity must submit Form 2F, unless exempted by § 122.26(c)(1)(ii). If the discharge is composed of storm water and non-storm water, the applicant must also submit, Forms 2C, 2D, and/or 2E, as appropriate (in addition to Form 2F).

SECTION I – ENGINEERING REPORT/BMP PLAN REQUIREMENTS

See ADEM 335-6-6-.08(i) & (j)

SECTION J – APPLICATION CERTIFICATION

THE INFORMATION CONTAINED IN THIS FORM MUST BE CERTIFIED BY A RESPONSIBLE OFFICIAL AS DEFINED IN ADEM ADMINISTRATIVE RULE 335-6-6-.09 "SIGNATORY REQUIREMENTS FOR PERMIT APPLICATIONS" (SEE BELOW).

"I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHER AND EVALUATE THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS."

"I FURTHER CERTIFY UNDER PENALTY OF LAW THAT ALL ANALYSES REPORTED AS LESS THAN DETECTABLE IN THIS APPLICATION OR ATTACHMENTS THERETO WERE PERFORMED USING THE EPA APPROVED TEST METHOD HAVING THE LOWEST DETECTION LIMIT FOR THE SUBSTANCE TESTED."

SIGNATURE OF
RESPONSIBLE OFFICIAL:

L. M. Stinson

DATE
SIGNED:

8/23/05

(TYPE OR PRINT)

NAME OF RESPONSIBLE OFFICIAL:

L. M. Stinson

OFFICIAL TITLE OF RESPONSIBLE OFFICIAL:

Vice President, Farley Project

MAILING ADDRESS:

P.O. Box 1295, Birmingham, AL 35201-1295

AREA CODE & PHONE NUMBER:

(205) 992-5000

SIGNATORY REQUIREMENTS FOR PERMIT APPLICATIONS

Responsible official is defined as follows:

1. In the case of a corporation, by a principal officer of at least the level of vice president; or a manager assigned or delegated in accordance with corporate procedures, with such delegation submitted in writing if required by the Department, who is responsible for manufacturing, production, or operating facilities and is authorized to make management decisions which govern the operation of the regulated facility;
2. In the case of a partnership, by a general partner;
3. In the case of a sole proprietorship, by the proprietor; or
4. In the case of a municipal, state, federal, or other public facility, by either a principal executive officer, or ranking elected official.

Alternatives Analysis

Applicant/Project: N/A

All new or expanded discharges (except discharges eligible for coverage under general permits) covered by the NPDES permitting program are subject to the provisions of the antidegradation policy. Applicants for such discharges to Tier 2 waters are required to demonstrate "... that the proposed discharge is necessary for important economic or social development." As a part of this demonstration, the applicant must complete an evaluation of the discharge alternatives listed below, to include calculation of total annualized project costs for each technically feasible alternative (using ADEM Form 312 for public-sector projects and ADEM Form 313 for private-sector projects). Alternatives with total annualized project costs that are less than 110% of the total annualized project costs for the Tier 2 discharge proposal are considered viable alternatives.

Alternative	Viable	Non-Viable	Comment
1 Land Application			
2 Pretreatment/Discharge to POTW			
3 Relocation of Discharge			
4 Reuse/Recycle			
5 Process/Treatment Alternatives			
6 On-site/Sub-surface Disposal			
<i>(other project-specific alternatives considered by the applicant; attach additional sheets if necessary)</i>			
7			
8			
9			

Pursuant to ADEM Administrative Code Rule 335-6-3-.04, I certify on behalf of the applicant that I have completed an evaluation of the discharge alternatives identified above, and reached the conclusions indicated.

Signature: _____
(Professional Engineer)

Date: _____

(Supporting documentation to be attached, referenced, or otherwise handled as appropriate.)

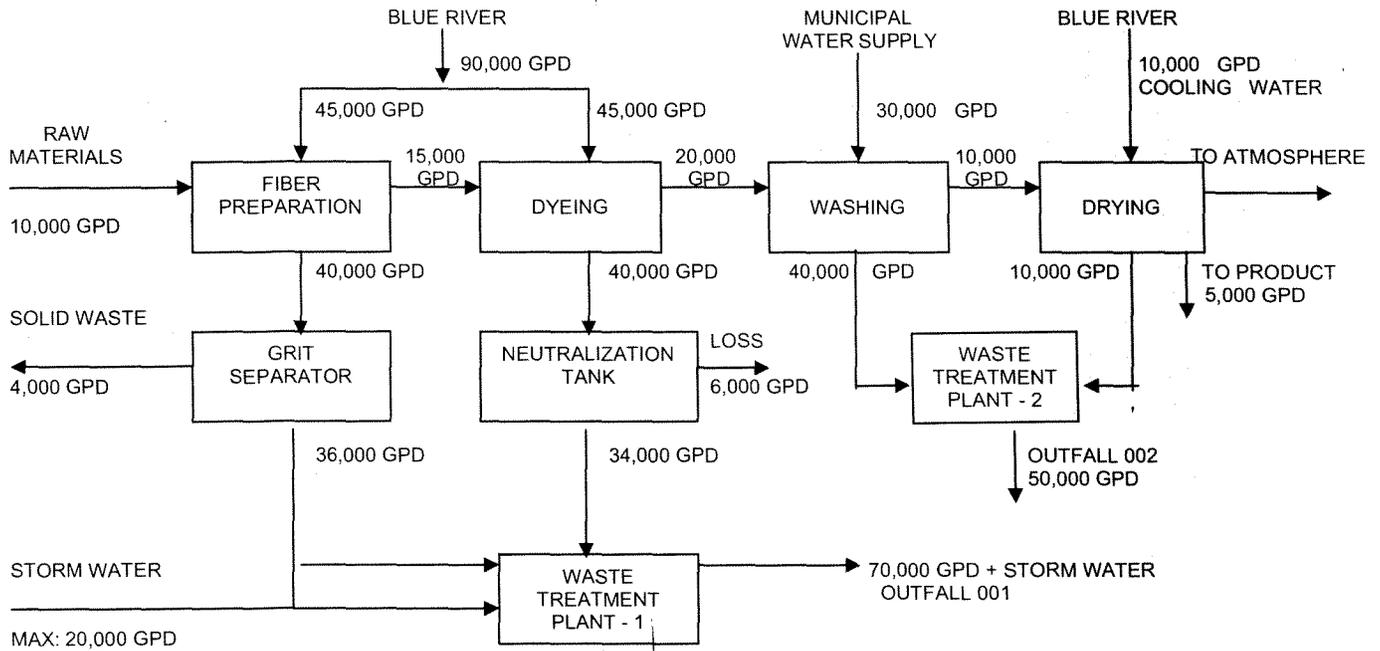
**Calculation of Total Annualized Project Costs
for Private-Sector Projects**

Capital Costs to be Financed (Supplied by applicant)	<u>\$ N/A (1)</u>
Interest rate for Financing (Expressed as a decimal)	<u>(i)</u>
Time Period of Financing (Assume 10 years*)	<u>10 years (n)</u>
Annualization Factor = $\frac{i}{(1+i)^{10} - 1} + i$	<u>(2)</u>
Annualized Capital Cost [Calculate: (1) x (2)]	<u>\$ (3)</u>
Annual Cost of Operation and Maintenance (including but not limited to monitoring, inspection, permitting fees, waste disposal charges, repair, administration and replacement)**	<u>\$ (4)</u>
Total Annual Cost of Pollution Control Project [(3) + (4)]	<div style="border: 1px solid black; padding: 2px;"><u>\$ (5)</u></div>

* While actual payback schedules may differ across projects and companies, assume equal annual payments over a 10-year period for consistency in comparing projects.

** For recurring costs that occur less frequently than once a year, pro rate the cost over the relevant number of years (e.g., for pumps replaced once every three years, include one-third of the cost in each year).

FIGURE 1



SCHEMATIC OF WATER FLOW
BROWN MILLS INC
CITY, COUNTY, STATE

Attachment 1 to ADEM Form 187
Owner and Operator Information

Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619

**Owner and Operator Information
Farley Nuclear Plant**

The operator of Farley Nuclear Plant is Southern Nuclear Operating Company. Alabama Power Company is the owner of this facility. Southern Nuclear Operating Company is responsible for the safe and reliable operation of six (6) nuclear units, including Farley Nuclear Plant, and is the licensed operator under U.S. Nuclear Regulatory Commission regulations.

Operator Address:

Southern Nuclear Operating Company
P.O. Box 1295
Birmingham, AL 35201-1295

Owner Address:

Alabama Power Company
600 North 18th Street
Birmingham, AL 35291

Attachment 2 to ADEM Form 187
Previously Issued State Environmental Permits

Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619

**Previously Issued NPDES Permits and Other State Environmental Permits
Farley Nuclear Plant**

Permit Name	Permit Number	Held By
NPDES Permit	AL0024619	Southern Nuclear Operating Co
Water Supply Permit	96-583	Southern Nuclear Operating Co
Solid Waste Disposal Facility Permit	35-05	Southern Nuclear Operating Co
Certificate of Use (Issued by Office of Water Resources)	0063.2	Southern Nuclear Operating Co
NPDES Construction Stormwater Registration (ADEM Code Ch. 335-6-12)	ALR160146	Southern Nuclear Operating Co
NPDES Construction Stormwater Registration (ADEM Code Ch. 335-6-12)	ALR163388	Southern Nuclear Operating Co

Attachment 3 to ADEM Form 187
Categorical Process Information

Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619

**Categorical Standards Information
Farley Nuclear Plant**

Regulated Process	Applicable Category	Applicable Subpart	Type of Discharge Flow
Once-Through Cooling	40 CFR 423	423.13(b)(1) 423.13(b)(2)	Continuous
Metal Cleaning	40 CFR 423	423.12(b)(5)	Continuous
Low Volume Wastes	40 CFR 423	423.12(b)(3)	Continuous & Intermittent
Cooling Tower Blowdown	40 CFR 423	423.13(d)(1) 423.13(d)(2)	Continuous

Categorical Process	Last 12 Months Monthly Average	Last 12 Months Highest Month Flow	Max Year in Last 5 Years Monthly Average	Five Year Average
DSN001	80.73 MGD	88.60 MGD	80.76 MGD	79.26 MGD
DSN005	5.280 MGD	6.943 MGD	5.688 MGD	4.478 MGD
DSN006	0 MGD	0 MGD	0.548 MGD	0.126 MGD
DSN007	4.867 MGD	6.044 MGD	5.253 MGD	4.286 MGD
DSN008	0 MGD	0 MGD	0.016 MGD	0.005 MGD
DSN012	0 MGD	0 MGD	0 MGD	0 MGD
DSN013	0 MGD	0 MGD	0 MGD	0 MGD
DSN014	0.317 MGD	0.391 MGD	0.339 MGD	0.305 MGD
DSN015	0.045 MGD	0.077 MGD	0.153 MGD	0.102 MGD
DSN016	0.038 MGD	0.078 MGD	0.062 MGD	0.048 MGD
DSN017	0.013 MGD	0.131 MGD	0.024 MGD	0.021 MGD
DSN018	0.023 MGD	0.138 MGD	0.025 MGD	0.023 MGD
DSN022	0.014 MGD	0.047 MGD	0.030 MGD	0.016 MGD
DSN023	0.026 MGD	0.130 MGD	0.040 MGD	0.028 MGD

Non-Categorical Process	Last 12 Months Monthly Average	Last 12 Months Highest Month Flow	Max Year in Last 5 Years Monthly Average	Five Year Average
DSN009	0.015 MGD	0.043 MGD	0.018 MGD	0.014 MGD

Batch Release Information

Outfalls DSN019 and DSN020 are batch release operations. These outfalls are liquid radwaste discharges from each unit, and are released in accordance with U.S. Nuclear Regulatory Commission (NRC) regulations and requirements. There is not a specified frequency for these discharges; the frequency and volume of water processed by the liquid radwaste system is highly dependent on activities that occur within the facility. For example, the volume of water processed is typically higher during unit refueling outages which occur on 18-month cycles. Each unit has two 5,000 gallon Waste Monitor Tanks (WMT) from which liquid radwaste discharges occur. The design flow of each WMT discharge pump is 35 gpm.

Attachment 4 to ADEM Form 187
Biocides and Corrosion Inhibitors

Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619

**Biocides and Corrosion Inhibitors
Farley Nuclear Plant**

A Material Safety Data Sheet (MSDS) is available for each of the products listed, and can be provided upon request.

Commodity Sodium Hypochlorite (Bleach)

Trade Name	N/A (Provided by GE Water Technologies)
Composition	Sodium Hypochlorite, Sodium Chloride, Sodium Hydroxide
Aquatic Toxicology	Rainbow Trout 96-hr Static Acute Bioassay LC50 = 1.9 mg/L No Effect Level = 1.38 mg/L Daphnia Magna 48-hr Static Acute Bioassay LC50 = 1.6 mg/L No Effect Level = 0.51 mg/L
Quantities	Bulk
Frequencies of Use	Daily
Discharge Concentrations	In accordance with NPDES permit limitations
EPA Registration Number	---

Potassium Chromate

Trade Name	N/A (Provided by Fisher Scientific)
Composition	Chromic Acid Dipotassium Salt
Aquatic Toxicology	Daphnia Magna LC50 = 15.3 µg/L as chromium
Quantities	Commercially available packages
Frequencies of Use	As needed
Discharge Concentrations	Not subject to discharge (utilized in closed system).
EPA Registration Number	---

Potassium Dichromate

Trade Name	N/A (Provided by Fisher Scientific)
Composition	Chromic Acid, Dipotassium Salt
Aquatic Toxicology	Fathead Minnow LC50 = 17,300 µg/L as chromium Water Flea Daphnia EC50 = 1,750 µg/L as chromium
Quantities	Commercially available packages
Frequencies of Use	As needed
Discharge Concentrations	Not subject to discharge (utilized in closed system).
EPA Registration Number	---

Drewgard 4109 Corrosion Inhibitor

Trade Name	Drewgard 4109 Corrosion Inhibitor
Composition	Sodium Metaborate Tetrahydrate, Sodium Nitrate, Sodium Tetraborate Decahydrate, Sodium Nitrite, Sodium Metasilicate Anhydrous, Acrylic Polymer
Aquatic Toxicology	No ecological data provided on Material Safety Data Sheet
Quantities	Commercially available packages
Frequencies of Use	As needed
Discharge Concentrations	Not subject to discharge (utilized in closed system).
EPA Registration Number	---

Biosperse 254 Microbiocide

Trade Name	Biosperse 254 Microbiocide
Composition	Glutaraldehyde, Methanol
Aquatic Toxicology	Seven Day Ceriodaphnia dubia static renewal conditions: 7 Day LC50 = 2.6 mg/L NOEC = 1.56 mg/L LOEC = 3.13 mg/L IC50 = 2.2 mg/L
Quantities	Commercially available packages
Frequencies of Use	As needed
Discharge Concentrations	Not subject to discharge (utilized in closed system).
EPA Registration Number	---

11-166 WPD

Trade Name	11-166 WPD
Composition	Sodium Tolyltriazole
Aquatic Toxicology	No ecological data provided on Material Safety Data Sheet
Quantities	Commercially available packages
Frequencies of Use	As needed
Discharge Concentrations	Not subject to discharge (utilized in closed system).
EPA Registration Number	---

Spectrus CT1300

Trade Name	Spectrus CT1300
Composition	Alkyl Dimethyl Benzyl Ammonium Chloride, Ethyl Alcohol
Aquatic Toxicology	Channel Catfish 96-hr Acute Toxicity: LC50 = 0.86 mg/L No Effect Level = 0.54 mg/L Fathead Minnow 96-hr Flow-Thru Bioassay: LC50 = 0.72 mg/L No Effect Level = 0.41 mg/L
Quantities	One 1,000-gallon tank per unit
Frequencies of Use	As needed for algae control in the cooling towers, added when cooling tower blowdown is closed and allowed to naturally decay for at least 6 hours prior to opening blowdown.
Discharge Concentrations	Normally product is decayed prior to opening cooling tower blowdown; concentrations at the Main Combined Facility Discharge are not expected to exceed the LC50 values provided above.
EPA Registration Number	---

Attachment 5 to ADEM Form 187

Water Supply Sources – Wells

**Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619**

**Water Supply Sources – Wells
Farley Nuclear Plant**

<u>Well</u>	<u>Capacity (MGD)</u>	<u>Depth (ft)</u>	<u>Latitude</u>	<u>Longitude</u>
Production Well #1	Out of Service	---	---	---
Production Well #2	0.720	775	31° 13' 02" N	85° 06' 49" W
Production Well #3	0.180	392	31° 13' 01" N	85° 06' 50" W
Construction Well #1	0.216	244	31° 13' 34" N	85° 07' 02" W
Construction Well #2	0.216	325	31° 13' 35" N	85° 06' 51" W
Water Supply Well	0.036	240	31° 12' 45" N	85° 06' 39" W
Plant Entrance Well	0.022	220	31° 13' 09" N	85° 07' 22" W
Daniel Well #3	Abandoned	---	---	---
Daniel Well #4	Abandoned	---	---	---

Attachment 6 to ADEM Form 187
Waste Storage and Disposal Information

Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619

**Materials Management Practices
Farley Nuclear Plant**

There have been no significant quantities of hazardous materials or wastes at FNP over the past three (3) years which have been treated, stored, or disposed in a manner which would result in exposure to stormwater and / or contamination of stormwater runoff. The following FNP procedures address management of hazardous materials and hazardous wastes and provide guidance relative to prevention of contamination resulting from contact with stormwater.

FNP-0-AP-60	Oil Spill Prevention, Control, and Countermeasure Plan, Hazardous Waste Contingency Plan
FNP-0-CCP-900	Hazardous Waste Holding Area Requirements
FNP-0-CCP-901	Shipping of Hazardous Wastes
FNP-0-CCP-904	Receipt and Identification of Industrial Wastes
FNP-0-CCP-905	Chemistry Support to FNP-0-SHP-26
FNP-0-SHP-26	Chemical Product Control and Hazard Communication Program
FNP-0-SHP-30	Waste Disposal
FNP-0-ENV-25	Operation of the Farley Nuclear Plant Landfill
FNP-0-TCP-23	Hazardous Waste Training Plan

In addition to the above procedures, proactive materials management practices are employed to minimize contact of hazardous materials with stormwater including indoor storage, structural control measures, secondary containment for tanks and container storage, and materials management training. A formal Hazard Communication Program (FNP-0-SHP-26) has also been implemented.

A Hazardous Waste Holding Area is located at the sewage treatment plant, and a Mixed Waste Holding Area is located inside the Auxiliary Building. Hazardous Waste Satellite Accumulation Areas have been established at the Secondary Chemistry Laboratory, the Water Treatment Plant, the Spent Battery Storage Building, the Paint Shop, and the Security Firing Range. The largest storage container at these locations is a 55-gallon drum. Additionally, an on-site Hazardous Waste Storage Area has been designated to be used in the event that the facility were to become a Large Quantity Generator.

Universal Waste collection areas have been established at the warehouse and at the Turbine Building Bay.

Sludge from the sewage treatment plant is removed by Tri-Counties Sewer Services, and the ultimate disposal site is the Omussee Creek Treatment Plant, operated by the City of Dothan.

**U.S. EPA Form 3510-1
General Information
Consolidated Permits Program**

**Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619**

FORM 1 GENERAL		U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION <i>Consolidated Permits Program</i> <i>(Read the "General Instructions" before starting.)</i>	I. EPA I.D. NUMBER AL0024619
LABEL ITEMS		PLEASE PLACE LABEL IN THIS SPACE	GENERAL INSTRUCTIONS If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorization under which this data is collected.
I. EPA I.D. NUMBER			
III. FACILITY NAME			
V. FACILITY MAILING LIST			
VI. FACILITY LOCATION			
II. POLLUTANT CHARACTERISTICS			
INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental from listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms .			
SPECIFIC QUESTIONS	MARK "X"	SPECIFIC QUESTIONS	MARK "X"
	YES NO FORM ATTACHED		YES NO FORM ATTACHED
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
C. Is this facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)	<input checked="" type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	D. Is this proposal facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
G. Do you or will you inject at this facility any produced water other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>
III. NAME OF FACILITY			
C	SKIP	FARLEY NUCLEAR PLANT	
1			
15	16-29	30	69
IV. FACILITY CONTACT			
A. NAME & TITLE (last, first, & title)		B. PHONE (area code & no.)	
C	ELMORE, GREGORY, SENIOR ENGINEER	205	992 5264
2			
15	16	45 46 48	49 51 52 55
V. FACILITY MAILING ADDRESS			
A. STREET OR P.O. BOX			
C	P. O. BOX 1295		
3			
15	16	45	
B. CITY OR TOWN		C. STATE	D. ZIP CODE
C	BIRMINGHAM	AL	35201
4			
15	16	40 41 42	47 51
VI. FACILITY LOCATION			
A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER			
C	7388 NORTH STATE HIGHWAY 95		
5			
15	16	45	
B. COUNTY NAME			
HOUSTON			
46	70		
C. CITY OR TOWN		D. STATE	E. ZIP CODE
C	COLUMBIA	AL	36319
6			N/A
15	16	40 41 42	47 51 52 54

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)														
A. FIRST					B. SECOND									
C	7	15	16	17	(specify)	7	15	16	19	(specify)				
					4911					N/A				
					C. THIRD					D. FOURTH				
C	7	15	16	17	(specify)	7	15	16	19	(specify)				
					N/A					N/A				

VIII. OPERATOR INFORMATION														
A. NAME								B. Is the name listed in Item VIII-A also the owner?						
C	8	18	19	SOUTHERN NUCLEAR OPERATING COMPANY						<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box; if "Other," specify.)										D. PHONE (area code & no.)				
F = FEDERAL	M = PUBLIC (other than federal or state)	P	(specify)	C	205	992	5000							
S = STATE	O = OTHER (specify)	56	N/A	A	15	16	18	19	21	22	25			
P = PRIVATE														
E. STREET OR PO BOX														
P. O. BOX 1295														

F. CITY OR TOWN				G. STATE	H. ZIP CODE	IX. INDIAN LAND					
C	B	15	16	40	AL	35201	Is the facility located on Indian lands?				
					42	42	47	51	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		

X. EXISTING ENVIRONMENTAL PERMITS									
A. NPDES (Discharges to Surface Water)					D. PSD (Air Emissions from Proposed Sources)				
C	T	I	AL0024619	30	C	T	8	NONE	30
9	N	17	18		9	P			
B. UIC (Underground Injection of Fluids)					E. OTHER (specify)				
C	T	I	NONE	30	C	T	8	SEE ATTACHED	30
9	U	17	18		9				
C. RCRA (Hazardous Wastes)					E. OTHER (specify)				
C	T	I	NONE	30	C	T	8	SEE ATTACHED	30
9	R	17	18		9				

XI. MAP									
Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers and other surface water bodies in the map area. See instructions for precise requirements.									

XII. NATURE OF BUSINESS (provide a brief description)									
Generation of electricity through the use of nuclear fuel.									

XIII. CERTIFICATION (see instructions)									
I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.									

A. NAME & OFFICIAL TITLE (type or print)					B. SIGNATURE					C. DATE SIGNED				
L. M. Stinson, Vice President, Farley Project										8/23/05				

COMMENTS FOR OFFICIAL USE ONLY										
C	15	16								55

Attachment 1 to U.S. EPA Form 3510-1
Section X. Existing Environmental Permits

Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619

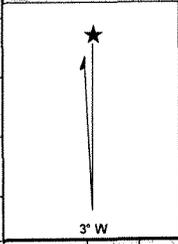
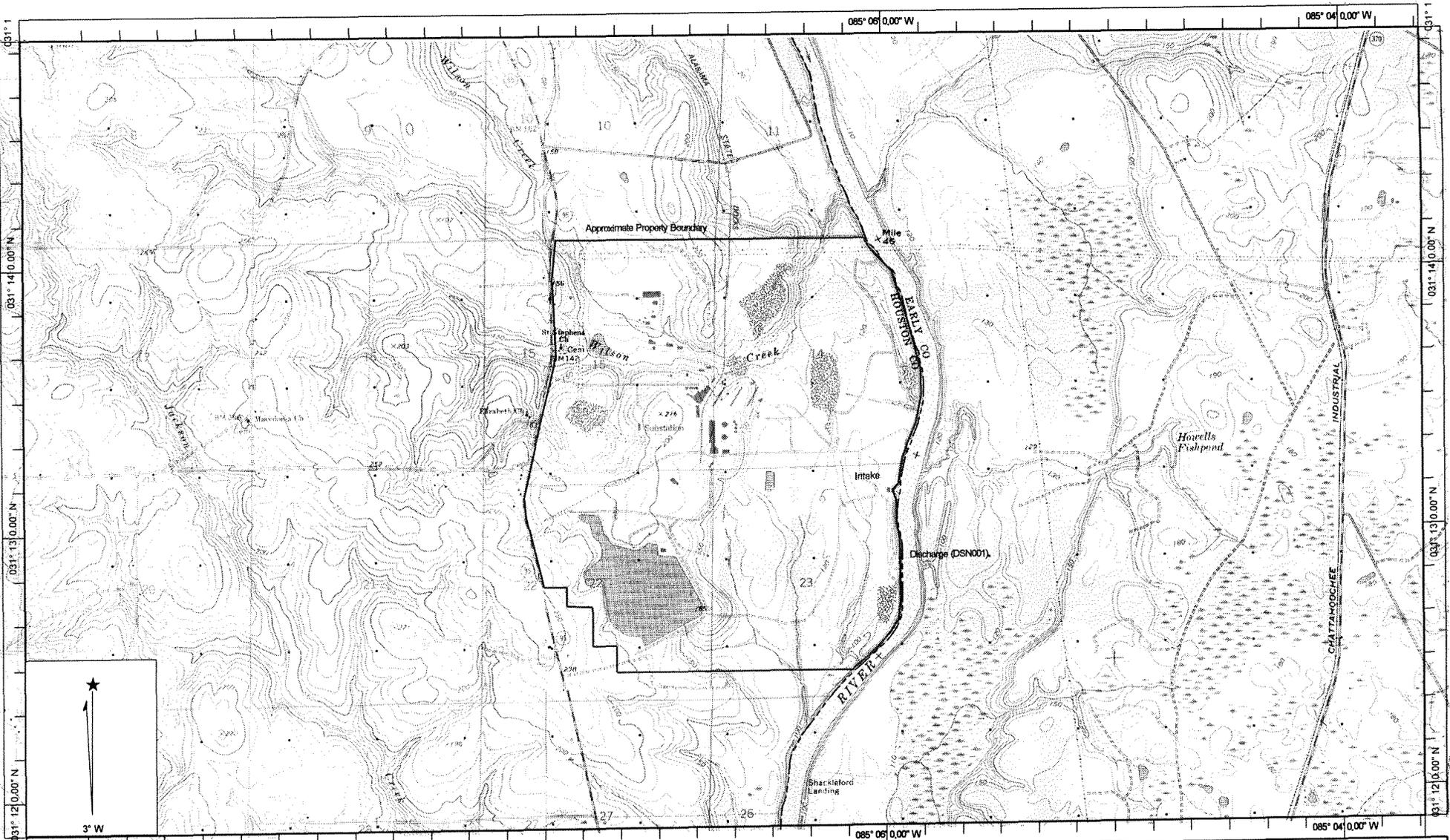
**Existing Environmental Permits
Farley Nuclear Plant**

Permit Name	Permit Number	Held By
NPDES Permit	AL0024619	Southern Nuclear Operating Co
Water Supply Permit	96-583	Southern Nuclear Operating Co
Solid Waste Disposal Facility Permit	35-05	Southern Nuclear Operating Co
Certificate of Use (Issued by Office of Water Resources)	0063.2	Southern Nuclear Operating Co
NPDES Construction Stormwater Registration (ADEM Code Ch. 335-6-12)	ALR160146	Southern Nuclear Operating Co
NPDES Construction Stormwater Registration (ADEM Code Ch. 335-6-12)	ALR163388	Southern Nuclear Operating Co
U.S. Army Corps of Engineers (Intake Dredging)	AL01-02094-V	Southern Nuclear Operating Co
U.S. Army Corps of Engineers (Barge Slip Dredging)	Application Submitted	Southern Nuclear Operating Co

Attachment 2 to U.S. EPA Form 3510-1

Section XI. Topographic Map

**Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619**



Name: GORDON
 Date: 7/29/2005
 Scale: 1 inch equals 2000 feet

Location: 031° 13' 22.9" N 085° 06' 42.8" W
 Caption: Farley Nuclear Plant
 Southern Nuclear Operating Company
 NPDES Permit No. AL0024619

Copyright (C) 1987, Maptech, Inc.

**U.S. EPA Form 3510-2C
Application for Permit to Discharge Wastewater
Consolidated Permits Program**

**Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619**

Please type or print in the unshaded areas only	EPA ID Number (Copy from Item 1 of Form 1) AL0024619	Form Approved OMB No. 2040-0086 Approval expires 7-31-88
Form 2C NPDES		U.S. ENVIRONMENTAL PROTECTION AGENCY APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICUTLRAL OPERATIONS Consolidated Permits Program

I. Outfall Location

For this outfall, list the latitude and longitude, and name of the receiving water(s)

Outfall Number (list)	Latitude			Longitude			Receiving Water (name)
	Deg	Min	Sec	Deg	Min	Sec	
001-016	31	12	52	85	05	55	CHATTAHOOCHEE RIVER

II. Flows, Sources of Pollution, and Treatment Technologies

A. For each outfall, provide a description of (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and stormwater runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

B. For each outfall, provide a description of (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and stormwater runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

1. Outfall Number	2. Operations Contributing Flow		3. Treatment		
	a. OPERATION (list)	b. AVERAGE FLOW	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1	
001	MAIN COMBINED FACILITY DISCHARGE	81.16 MGD	SEE ATTACHED	4-A	
005	COOLING TOWER BLOWDOWN - UNIT 1	6.04 MGD	SEE ATTACHED	4-A	2-E
006	COOLING TOWER OVERFLOW - UNIT 1	*	SEE ATTACHED	4-A	
007	COOLING TOWER BLOWDOWN - UNIT 2	6.04 MGD	SEE ATTACHED	4-A	2-E
008	COOLING TOWER OVERFLOW - UNIT 2	*	SEE ATTACHED	4-A	
009	SEWAGE TREATMENT PLANT	0.02 MGD	SEE ATTACHED	4-A 1-V	2-F 3-A
012	CHEMICAL METAL CLEANING WASTES	*	SEE ATTACHED	4-A	
013	TREATED CHROMATE BEARING WASTEWATER	*	SEE ATTACHED		
014	WASTE SETTLING POND	0.30 MGD	SEE ATTACHED	4-A	1-V
015	TURBINE BUILDING SUMP - UNIT 1	*	SEE ATTACHED	4-A	
016	TURBINE BUILDING SUMP - UNIT 2	*	SEE ATTACHED	4-A	
	* INTERMITTENT FLOWS				

Please type or print in the unshaded areas only	EPA ID Number (Copy from Item 1 of Form 1) AL0024619	Form Approved OMB No. 2040-0086 Approval expires 7-31-88
Form 2C NPDES		U.S. ENVIRONMENTAL PROTECTION AGENCY APPLICATION FOR PERMIT TO DISCHARGE WASTEWATER EXISTING MANUFACTURING, COMMERCIAL, MINING AND SILVICUTLRAL OPERATIONS Consolidated Permits Program

I. Outfall Location

For this outfall, list the latitude and longitude, and name of the receiving water(s)

Outfall Number (list)	Latitude			Longitude			Receiving Water (name)
	Deg	Min	Sec	Deg	Min	Sec	
019-025	31	12	52	85	05	55	CHATTAHOOCHEE RIVER

II. Flows, Sources of Pollution, and Treatment Technologies

A. For each outfall, provide a description of (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and stormwater runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

B. For each outfall, provide a description of (1) all operations contributing wastewater to the effluent, including process wastewater, sanitary wastewater, cooling water, and stormwater runoff; (2) the average flow contributed by each operation; and (3) the treatment received by the wastewater. Continue on additional sheets if necessary.

1. Outfall Number	2. Operations Contributing Flow		3. Treatment	
	a. OPERATION (list)	b. AVERAGE FLOW	a. DESCRIPTION	b. LIST CODES FROM TABLE 2C-1
019	LIQUID RADWASTE SYSTEM - UNIT 1	*	SEE ATTACHED	4-A 2-J
020	LIQUID RADWASTE SYSTEM - UNIT 2	*	SEE ATTACHED	4-A 2-J
022	RIVER WATER BUILDING SUMP - SOUTH	*	SEE ATTACHED	4-A
023	RIVER WATER BUILDING SUMP - NORTH	*	SEE ATTACHED	4-A
030	INTAKE SCREEN BACKWASH WATER TO INTAKE CANAL (UNITS 1 & 2)	*	SEE ATTACHED	4-A
024	SOUTHEAST YARD DRAINAGE	*	SEE ATTACHED	4-A
025	EAST YARD DRAINAGE	*	SEE ATTACHED	4-A
* INTERMITTENT FLOWS				

CONTINUED FROM THE FRONT

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items II-A or B intermittent or seasonal?
 YES (complete the following table) **NO** (go to Section III)

1. OUTFALL NUMBER (list)	2. OPERATION(S) CONTRIBUTING FLOW (list)	3. FREQUENCY		4. FLOW				c. DURATION (in days)
		a. DAYS PER WEEK (specify average)	b. MONTHS PER YEAR (specify average)	a. FLOW RATE (in mgd)		b. TOTAL VOLUME (specify with units)		
				1. LONG TERM AVERAGE	2. MAXIMUM DAILY	1. LONG TERM AVERAGE	2. MAXIMUM DAILY	
019	LIQUID RADWASTE SYSTEM - UNIT 1	SEE ATTACHED						
020	LIQUID RADWASTE SYSTEM - UNIT 2	SEE ATTACHED						

III. PRODUCTION

A. Does an effluent guideline limitation promulgated by EPA under Section 304 of the Clean Water Act apply to your facility?
 YES (complete Item III-B) **NO** (go to Section IV)

B. Are the limitations in the applicable effluent guideline expressed in terms of production (or other measure of operation)?
 YES (complete Item III-C) **NO** (go to Section IV)

C. If you answered "yes" to Item III-B, list the quantity which represents an actual measurement of your level of production, expressed in the terms and units used in the applicable effluent guideline, and indicate the affected outfalls.

1. AVERAGE DAILY PRODUCTION			2. AFFECTED OUTFALLS (list outfall numbers)
a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	
N/A			

IV. IMPROVEMENTS

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading, or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.
 YES (complete the following table) **NO** (go to Item IV-B)

1. IDENTIFICATION OF CONDITION, AGREEMENT, ETC.	2. AFFECTED OUTFALLS		3. BRIEF DESCRIPTION OF PROJECT	4. FINAL COMPLIANCE DATE	
	a. No	b. SOURCE OF DISCHARGE		a. REQUIRED	b. PROJECTED
N/A					

B. OPTIONAL: You may attach additional sheets describing any additional water pollution control programs (or other environmental projects which may affect your discharges) you now have underway or which you plan. Indicate whether each program is now underway or planned, and indicate your actual or planned schedules for construction.
 MARK "X" IF DESCRIPTION OF ADDITIONAL CONTROL PROGRAM IS ATTACHED

CONTINUED FROM THE FRONT

VII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

YES (identify the test(s) and describe their purpose below)

NO (go to Section VIII)

ANNUAL BIOMONITORING AS REQUIRED BY EXISTING NPDES PERMIT ON THE MAIN COMBINED FACILITY DISCHARGE (DSN001).

VIII. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in Item V performed by a contract laboratory or consulting firm?

YES (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

NO (go to Section IX)

A. NAME	B. ADDRESS	C. TELEPHONE (area code & no.)	D. POLLUTANTS ANALYZED (list)
Alabama Power Company General Test Laboratory	Building No. 8 P.O. Box 2641 Birmingham, AL 35291	(205) 664-6194	All except pH, temperature, chlorine, and radiological.
Florida Radiochemistry Services, Inc.	5456 Hoffner Avenue Suite 201 Orlando, FL 32812	(407) 382-7733	Radiological
		()	
		()	
		()	
		()	
		()	
		()	
		()	

IX. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. NAME & OFFICIAL TITLE (type or print) L. M. Stinson, Vice President, Farley Project	B. PHONE NO. (area code & no.) (205) 992-5000
C. SIGNATURE 	D. DATE SIGNED 8/23/05

PLEASE PRINT OR TYPE IN THE UNSHADED AREAS ONLY. You may report some or all of this information on separate sheets (use the same format) instead of completing these pages. SEE INSTRUCTIONS.

EPA I.D. NUMBER (copy from Item 1 of Form 1)
AL0024619

V. INTAKE AND EFFLUENT CHARACTERISTICS (continued from page 3 of Form 2-C)

PART A - You must provide the results of at least one analysis for every pollutant in this table. Complete one table for each outfall. See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						d. NO. OF ANALYSIS	3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)			a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	< 2	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 2	n/a	1
b. Chemical Oxygen Demand (COD)	4	1,340	n/a	n/a	n/a	n/a	1	mg/l	kg/day	4	1,090	1
c. Total Organic Carbon (TOC)	2.43	814.3	n/a	n/a	n/a	n/a	1	mg/l	kg/day	2.27	618.7	1
d. Total Suspended Solids (TSS)	12	4,021	n/a	n/a	n/a	n/a	1	mg/l	kg/day	9	2,453	1
e. Ammonia (as N)	0.16	53.6	n/a	n/a	n/a	n/a	1	mg/l	kg/day	0.11	30.0	1
f. Flow	Value 105.02		Value 88.60		Value 79.87		1,277	MGD	n/a	Value 72.00		1
g. Temperature (winter)	Value 23.0		Value 20.7		Value 16.7		47	°C		Value 12.8		47
h. Temperature (summer)	Value 39.0		Value 34.2		Value 31.5		45	°C		Value 27.8		44
i. pH	Minimum 6.04	Maximum 7.95	Minimum 6.62	Maximum 7.61			183	STANDARD UNITS				

PART B - Mark "X" in column 2-a for each pollutant you know or have reason to believe is present. Mark "X" in column 2-b for each pollutant you believe to be absent. If you mark column 2a for any pollutant which is limited either directly, or indirectly but expressly, in an effluent limitation guideline, you must provide the results of at least one analysis for that pollutant. For other pollutants for which you mark column 2a, you must provide quantitative data or an explanation of their presence in your discharge. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		2. EFFLUENT						d. NO. OF ANALYSIS	3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)			a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.02	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.02	n/a	1
b. Chlorine, Total Residual	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.22	63.2	0.13	41.2	0.09	26.0	1,099	mg/l	kg/day	< 0.01	n/a	1
c. Color	<input checked="" type="checkbox"/>	<input type="checkbox"/>	28	n/a	n/a	n/a	n/a	n/a	1	PCU	n/a	17	n/a	1
d. Fecal Coliform	<input checked="" type="checkbox"/>	<input type="checkbox"/>	< 1	n/a	n/a	n/a	n/a	n/a	1	col/100 ml	n/a	10	2,726	1
e. Fluoride (16984-48-8)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.12	40.2	n/a	n/a	n/a	n/a	1	mg/l	kg/day	0.12	32.7	1
f. Nitrate-Nitrite (as N)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.500	167.5	n/a	n/a	n/a	n/a	1	mg/l	kg/day	0.38	103.6	1

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. BELIEVED PRESENT	b. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSIS	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
g. Nitrogen, Total Organic (as N)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.330	110.6	n/a	n/a	n/a	n/a	1	mg/l	kg/day	0.35	95.4	1
h. Oil and Grease	<input checked="" type="checkbox"/>	<input type="checkbox"/>	< 1.4	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 1.4	n/a	1
i. Phosphorus (as P), Total (7723-14-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.13	43.6	n/a	n/a	n/a	n/a	1	mg/l	kg/day	0.12	32.7	1
j. Radioactivity														
(1) Alpha, Total	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<0.6	n/a	n/a	n/a	n/a	n/a	1	pCi/l	n/a	<0.8	n/a	1
(2) Beta, Total	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3.0	n/a	n/a	n/a	n/a	n/a	1	pCi/l	n/a	2.8	n/a	1
(3) Radium, Total	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<0.9	n/a	n/a	n/a	n/a	n/a	1	pCi/l	n/a	<0.9	n/a	1
(4) Radium 226, Total	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.1	n/a	n/a	n/a	n/a	n/a	1	pCi/l	n/a	0.3	n/a	1
k. Sulfate (as SO ₄) (14808-79-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.96	2,667.3	n/a	n/a	n/a	n/a	1	mg/l	kg/day	6.05	1,648.9	1
l. Sulfide (as S)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.13	43.6	n/a	n/a	n/a	n/a	1	mg/l	kg/day	0.06	16.4	1
m. Sulfite (as SO ₃) (14265-45-3)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.25	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.25	n/a	1
n. Surfactants	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.01	3.4	n/a	n/a	n/a	n/a	1	mg/l	kg/day	0.02	5.5	1
o. Aluminum, Total (7429-90-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1.27	425.6	n/a	n/a	n/a	n/a	1	mg/l	kg/day	1.26	343.4	1
p. Barium, Total (7440-39-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.030	10.1	n/a	n/a	n/a	n/a	1	mg/l	kg/day	0.030	8.2	1
q. Boron, Total (7440-42-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.060	20.1	n/a	n/a	n/a	n/a	1	mg/l	kg/day	0.010	2.7	1
r. Cobalt, Total (7440-48-4)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.004	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.004	n/a	1
s. Iron, Total (7439-89-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1.30	435.6	n/a	n/a	n/a	n/a	1	mg/l	kg/day	1.54	419.7	1
t. Magnesium, Total (7439-95-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1.90	636.7	n/a	n/a	n/a	n/a	1	mg/l	kg/day	1.74	474.2	1
u. Molybdenum, Total (7439-98-7)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.01	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.01	n/a	1
v. Manganese, Total (7439-96-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.099	33.2	n/a	n/a	n/a	n/a	1	mg/l	kg/day	0.182	49.6	1
w. Tin, Total (7440-31-5)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.002	ND	n/a	n/a	n/a	n/a	1	mg/l	kg/day	0.004	1.1	1
x. Titanium, Total (7440-32-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.030	10.1	n/a	n/a	n/a	n/a	1	mg/l	kg/day	0.028	7.6	1

PART C - If you are a primary industry and this outfall contains process wastewater, refer to Table 2c-2 in the instructions to determine which of the GC/MS fractions you must test for. Mark "X" in column 2-a for all such GC/MS fractions that apply to your industry and for ALL toxic metals, cyanides, and total phenols. If you are not required to mark column 2-a (*secondary industries, nonprocess wastewater outfalls, and non-required GC/MS fractions*), mark "X" in column 2-b for each pollutant you know or have reason to believe is present. Mark "X" in column 2-c for each pollutant you believe is absent. If you mark column 2a for any pollutant, you must provide the results of at least one analysis for that pollutant. If you mark column 2b for any pollutant, you must provide the results of at least one analysis for that pollutant. If you know or have reason to believe it will be discharged in concentrations of 10 ppb or greater. If you mark column 2b for acrolein, acrylonitrile, 2,4 dinitrophenol, or 2-methyl-4, 6 dinitrophenol, you must provide the results of at least one analysis for each of these pollutants which you know or have reason to believe that you discharge in concentrations of 100 ppb or greater. Otherwise, for pollutants for which you mark column 2b, you must either submit at least one analysis or briefly describe the reasons the pollutant is expected to be discharged. Note that there are 7 pages to this part; please review each carefully. Complete one table (all 7 pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'			2. EFFLUENT							3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
	METALS, CYANIDE, AND TOTAL PHENOLS														
1m. Antimony, Total (7440-36-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.012	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.012	n/a	1
2M. Arsenic, Total (7440-38-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.005	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.005	n/a	1
3M. Beryllium, Total (7440-41-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.001	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.001	n/a	1
4M. Cadmium, Total (7440-43-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.002	n/a	1
5M Chromium, Total (7440-47-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.012	4.11	0.012	4.11	0.001	0.46	43	mg/l	kg/day	<0.001	n/a	1
6M Copper, Total (7440-50-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	0.009	3.0	n/a	n/a	n/a	n/a	1	mg/l	kg/day	0.005	1.36	1
7M lead, Total (7439-92-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.004	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.004	n/a	1
8M Mercury, Total (7439-97-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0002	n/a	1
9M Nickel, Total (7440-02-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.004	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.004	n/a	1
10M Selenium, Total (7782-49-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.005	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.005	n/a	1
11M Silver, Total (7440-22-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.006	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.006	n/a	1
12M Thallium, Total (7440-28-0)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	< 0.007	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.007	n/a	1
13M Zinc, Total (7440-66-6)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.011	3.7	n/a	n/a	n/a	n/a	1	mg/l	kg/day	0.005	1.36	1
14M Cyanide, Total (57-12-5)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	< 0.005	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.005	n/a	1
15M Phenols, Total	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	0.01	2.6	n/a	n/a	n/a	n/a	1	mg/l	kg/day	0.01	2.7	1
DIOXIN															
2,3,7,8-Tetrachlorodibenzo-P-Dioxin (1764--01-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DESCRIBE RESULTS NOT TESTED											

CONTINUED FROM THE FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'			2. EFFLUENT						d. NO. OF ANALYSES	3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)			a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS - VOLATILE COMPOUNDS															
1V. Acrolein (107-02-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.002	n/a	1
2V Acrylonitrile (107-13-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.001	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.001	n/a	1
3V Benzene (71-43-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.002	n/a	1
4V Bis (Chloromethyl) Ether (542-88-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	n/a	n/a	n/a	n/a	n/a	n/a	0	n/a	n/a	n/a	n/a	0
5V Bromoform (75-25-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.003	n/a	1
6V Carbon Tetrachloride (56-23-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.002	n/a	1
7V Chlorobenzene (108-90-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.001	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.001	n/a	1
8V Chlorodibromomethane (124-48-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.001	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.001	n/a	1
9V Chloroethane (75-00-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.002	n/a	1
10V 2-Chloroethylvinyl Ether (110-75-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.001	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.001	n/a	1
11V Chloroform (67-66-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	0.0022	0.74	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.002	n/a	1
12V Dichlorobromoethane (75-71-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.001	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.001	n/a	1
13V Dichlorodifluoromethane (75-71-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	n/a	n/a	n/a	n/a	n/a	n/a	0	n/a	n/a	n/a	n/a	0
14V 1,1-Dichloroethane (75-34-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.002	n/a	1
15V 1,2-Dichloroethane (107-06-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.002	n/a	1
16V 1,1-Dichloroethylene (75335-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.001	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.001	n/a	1
17V 1,2-Dichloropropane (78-87-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.002	n/a	1
18V 1,3-Dichloropropylene (542-76-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.001	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.001	n/a	1
19V Ethylbenzene (100-41-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.002	n/a	1
20V Methyl Bromide (74-83-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.002	n/a	1
21V Methyl Chloride (74-87-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.002	n/a	1

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'			2. EFFLUENT						d. NO. OF ANALYSES	3. UNITS (specify if blank)		4. INTAKE (optional)		b. NO. OF ANALYSES
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)			a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS - VOLATILE COMPOUNDS (continued)															
22 V Methylene Chloride (75-09-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.002	n/a	1
23V 1,1,2,2-Tetra-Chloroethane (79-34-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.002	n/a	1
24V Tetrachloroethylene (127-18-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.002	n/a	1
25V Toluene (108-88-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.002	n/a	1
26V 1,2-Trans-Dichloroethylene (156-60-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.001	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.001	n/a	1
27V 1,1,1-Trichloroethane (71-55-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.001	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.001	n/a	1
28V 1,1,2-Trichloroethane (79-00-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.002	n/a	1
29V Trichloroethylene (79-01-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.002	n/a	1
30V Trichlorofluoromethane (75-69-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	n/a	n/a	n/a	n/a	n/a	n/a	0	n/a	n/a	n/a	n/a	0
31V Vinyl Chloride (75-01-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.001	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.001	n/a	1
GC/MS FRACTION - ACID COMPOUNDS															
1A 2-Chlorophenol (95-57-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0033	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0033	n/a	1
2A 2,4-Dichlorophenol (120-83-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0027	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0027	n/a	1
3A 2,4-Dimethylphenol (105-67-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0027	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0027	n/a	1
4A 4,6-Dinitro-O-cresol (534-52-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.024	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.024	n/a	1
5A 2,4-Dinitrophenol (51-28-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.042	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.042	n/a	1
6A 2-Nitrophenol (88-75-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0036	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0036	n/a	1
7A 4-Nitrophenol (100-02-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0024	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0024	n/a	1
8A P-Chloro-M-Cresol (59-50-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0030	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0030	n/a	1
9A Penta-chlorophenol (87-86-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0036	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0036	n/a	1
10A Phenol (101-95-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0015	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0015	n/a	1
11A 2,4,6-Trichlorophenol (88-06-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0027	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0027	n/a	1

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1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'			2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS															
1B Acenaphthene (83-32-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0019	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0019	n/a	1
2B Acenaphthylene (208-96-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0035	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0035	n/a	1
3B Anthracene (120-12-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0019	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0019	n/a	1
4B Benzidine (92-87-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.044	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.044	n/a	1
5B Benzo (a) Anthracene (56-55-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0078	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0078	n/a	1
6B Benzo (a) Pyrene (50-32-8)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0025	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0025	n/a	1
7B 3,4-Benzofluoranthene (205-99-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0048	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0048	n/a	1
8B Benzo (ghi) Perylene (191-24-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0041	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0041	n/a	1
9B Benzo (k) Fluoranthene (207-08-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0025	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0025	n/a	1
10B Bis (2-Chloroethoxy) Methane (111-91-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0053	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0053	n/a	1
11B Bis (2-Chloroethyl) Ether (111-44-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0057	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0057	n/a	1
12B Bis (2-Chloroisopropyl) Ether (102-60-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0057	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0057	n/a	1
13B Bis(2-Ethylhexyl) Phthalate (117-81-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0025	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	0.0084	2.29	1
14 B 4-Bromophenyl Phenyl Ether (101-55-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0019	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0019	n/a	1
15B Butyl Benzyl Phthalate (85-68-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0025	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0025	n/a	1
16B 2-Chloronaphthalene (91-68-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0019	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0019	n/a	1
17B 4-Chlorophenyl Phenyl Ether (7005-72-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0042	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0042	n/a	1
18B Chrysene (218-01-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0025	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0025	n/a	1
19B Dibenz(a,h) Anthracene (53-70-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0025	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0025	n/a	1
20B 1,2-Dichlorobenzene (95-50-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0019	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0019	n/a	1
21B 1,3-Dichlorobenzene (541-73-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0019	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0019	n/a	1

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EPA I.D. NUMBER (copy from Item 1 of Form 1)
AL0024619OUTFALL NUMBER
DSN001

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'			2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION		b. MASS		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS			
GC/MS - BASE/NEUTRAL COMPOUNDS (continued)															
22B 1,4-Dichlorobenzene (106-46-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0044	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0044	n/a	1
23B 3,3'-Dichlorobenzidine (91-94-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0165	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0165	n/a	1
24B Diethyl Phthalate (84-66-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0019	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0019	n/a	1
25B Dimethyl Phthalate (131-11-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0016	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0016	n/a	1
26B Di-N-Butyl Phthalate (131-11-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0025	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0025	n/a	1
27B 2,4-Dinitrotoluene (121-14-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0057	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0057	n/a	1
28B 2,6-Dinitrotoluene (606-20-2)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0019	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0019	n/a	1
29B Di-N-Octyl Phthalate (117-84-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0025	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0025	n/a	1
30B 1,2-Diphenylhydrazine (as Azo-benzene) (122-66-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1
31B Fluoranthene (206-44-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0022	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0022	n/a	1
32B Fluorene (86-73-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0019	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0019	n/a	1
33B Hexachlorobenzene (118-74-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0019	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0019	n/a	1
34B Hexachlorobutadiene (87-68-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0009	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0009	n/a	1
35B Hexachlorocyclopentadiene (77-47-4)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.001	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.001	n/a	1
36B Hexachloroethane (67-72-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0016	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0016	n/a	1
37B Indeno (1,2,3-cd) Pyrene (193-39-5)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0037	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0037	n/a	1
38B Isophorone (78-59-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0022	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0022	n/a	1
39B Naphthalene (91-20-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0016	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0016	n/a	1
40B Nitrobenzene (98-95-3)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.002	n/a	1
41B N-Nitrosodimethylamine (62-75-9)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1
42B N-Nitrosdi-N-Propylamine (621-64-7)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.002	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.002	n/a	1

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1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'			2. EFFLUENT						d. NO. OF ANALYSES	3. UNITS (specify if blank)		4. INTAKE (optional)		
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)			a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)															
43B N-Nitrosodiphenylamine (86-30-6)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0019	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0019	n/a	1
44B Phenanthrene (85-01-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0054	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0054	n/a	1
45B Pyrene (129-00-0)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0019	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0019	n/a	1
46B 1,2,4-Trichlorobenzene (120-82-1)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<0.0019	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	<0.0019	n/a	1
GC/MS FRACTION - PESTICIDES															
1P Aldrin (309-00-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1
2P β-Bhc (319-85-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1
4P γ-BHC (58-89-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1
5P δ-BHC (319-86-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1
6P Chlordane (57-74-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1
7P 4,4'-DDT (50-29-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1
8P 4,4'-DDE (72-55-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1
9P 4,4'-DDD (72-54-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1
10P Dieldrin (60-57-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1
11P α-Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1
12P β-Endosulfan (115-29-7)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1
13P Endosulfan Sulfate (1031-07-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1
14P Endrin (72-20-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.001	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.001	n/a	1
15P Endrin Aldehyde (7421-93-4)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1
16P Heptachlor (76-44-8)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1

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EPA I.D. NUMBER (copy from Item 1 of Form 1)
AL0024619

OUTFALL NUMBER
DSN001

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'			2. EFFLUENT						3. UNITS (specify if blank)		4. INTAKE (optional)			
	a. TESTING REQUIRED	b. BELIEVED PRESENT	c. BELIEVED ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALYSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALYSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS - PESTICIDES (continued)															
17P Heptachlor Epoxide (1024-57-3)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1
18P PCB-1242 (53469-21-9)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.005	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.005	n/a	1
19P PCB-1254 (11097-69-1)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.005	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.005	n/a	1
20P PCB-1221 (11104-28-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.005	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.005	n/a	1
21P PCB-1232 (11141-16-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.005	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.005	n/a	1
22P PCB-1248 (12672-29-6)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.005	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.005	n/a	1
23P PCB-1260 (11096-82-5)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.005	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.005	n/a	1
24P PCB-1016 (12674-11-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.005	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.005	n/a	1
25P Toxaphene (8001-35-2)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	< 0.003	n/a	n/a	n/a	n/a	n/a	1	mg/l	kg/day	< 0.003	n/a	1

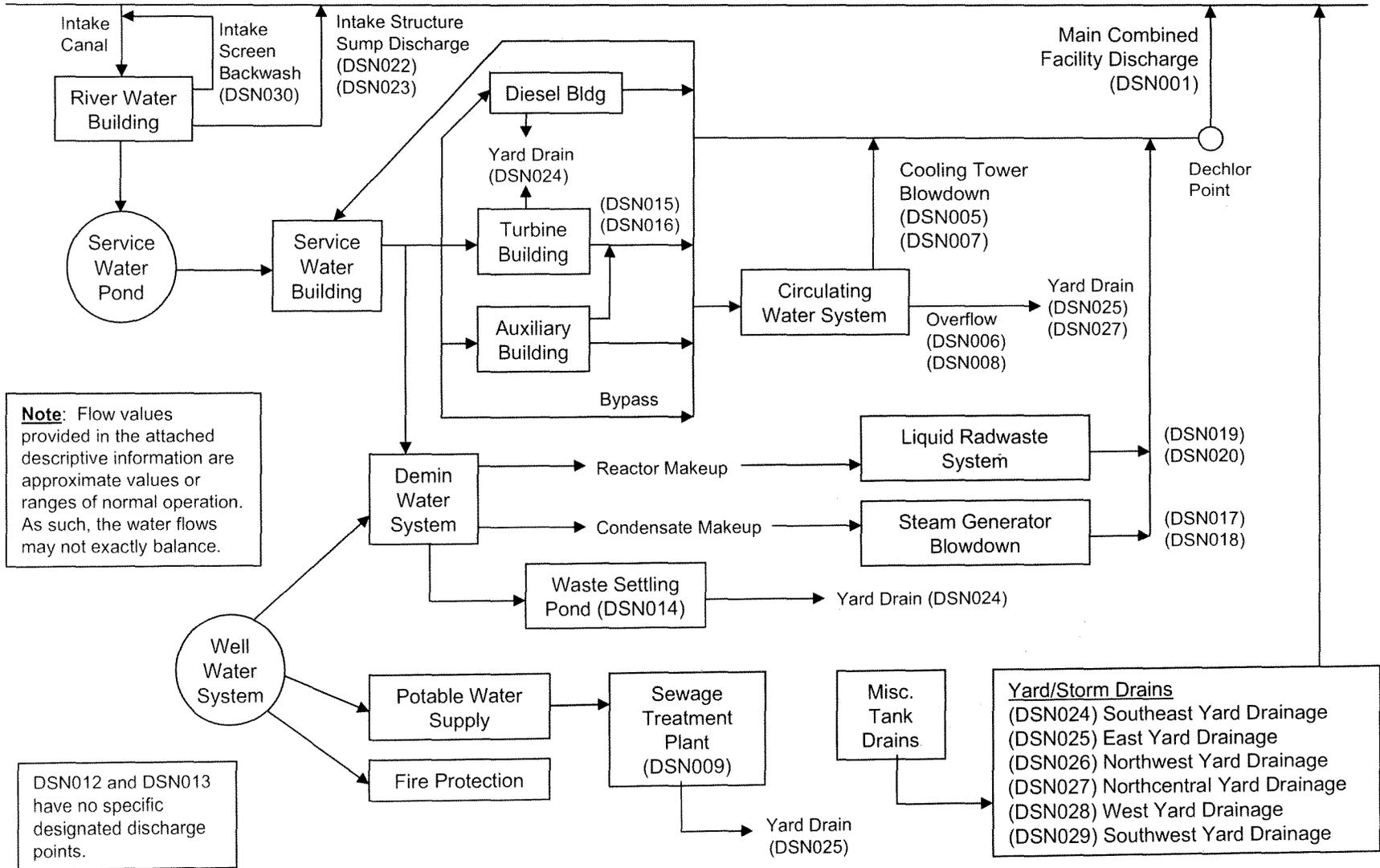
Attachment 1 to U.S. EPA Form 3510-2C

Section IIA. Line Drawing

**Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619**

Farley Nuclear Plant
 Line Drawing/Water Balance
 Permit No. AL0024619

CHATTAHOOCHEE RIVER



Attachment 2 to U.S. EPA Form 3510-2C
Section IVA and B. Intake and Effluent Characteristics
Chemical Analysis Reports

Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPIKTK
Sample Date : 05-May-05
Customer ID : AL-0024619
Delivery Date : 05-May-05

Description: FNP - Intake Water
Repermitting - Grab Sample

Laboratory ID Number: AJ12232

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
<i>General Characteristics</i>							
Flow	KD	5/5/2005	Field Test		0.000	72.00	MGD
Field pH	RKB	5/5/2005	EPA 150.1		0.00	7.03	SU
Temperature	MAR	5/5/2005	Field Data		0.	19	Deg. C.
Chlorine, Total Residual	RKB	5/5/2005	Field Test		0.01	Not Detected	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments:

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____

Date: 18-May-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081



CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPIKTK
Sample Date : 05-May-05
Customer ID : AL-0024619
Delivery Date : 05-May-05

Description: FNP - Intake Water
Repermitting - Grab Sample

Laboratory ID Number: AJ12230

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
Metals, Cyanide, Total Phenols							
Cyanide, Total	HRG	5/11/2005	EPA 335.2		0.005	Not Detected	mg/l
Phenol, Total	HRG	5/19/2005	EPA 420.1		0.01	0.01	mg/l
General Characteristics							
Coliform - Fecal	HRG	5/6/2005	SM 9222D		1.	10.	colonies/100
Oil and Grease	RDA	5/10/2005	EPA 1664		1.4	Not Detected	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as submitted.

Comments:

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____

Date: 25-May-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPIKTK
Sample Date : 07-Jun-05
Customer ID : AL-0024619
Delivery Date : 07-Jun-05

Description: FNP - Intake Water
Repermitting Composite Sample

Laboratory ID Number: AJ15117

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
<i>Volatile Compounds</i>							
Acrolein	JCC	6/9/2005	EPA 603		0.002	Not Detected	mg/l
Acrylonitrile	JCC	6/9/2005	EPA 603		0.001	Not Detected	mg/l
Benzene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Bromoform	RAH	6/15/2005	EPA 624		0.0030	Not Detected	mg/l
Carbon Tetrachloride	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Chlorobenzene	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
Chlorodibromomethane	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
Chloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
2-Chloroethylvinyl Ether	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
Chloroform	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Dichlorobromomethane	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
1,1-Dichloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
1,2-Dichloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
1,1-Dichloroethylene	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
1,2-Dichloropropane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
cis-1,3-Dichloropropylene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
trans-1,3-Dichloropropylene	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
Ethylbenzene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Methyl Bromide	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Methyl Chloride	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Methylene Chloride	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
1,1,2,2-Tetrachloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Tetrachloroethylene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Toluene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
1,2-trans-Dichloroethylene	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
1,1,1-Trichloroethane	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
1,1,2-Trichloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Trichloroethylene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments: COMPOSITE SAMPLE.

Note:

Cr analysis performed by analyst JA3 is TOTAL RECOVERABLE,
and analysis performed by FKK is Total Cr (01034).

CCS - 8/15/05

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____

Date: 15-Aug-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPI NTK
Sample Date : 07-Jun-05
Customer ID : AL-0024619
Delivery Date : 07-Jun-05

Description: FNP - Intake Water
Repermitting Composite Sample

Laboratory ID Number: AJ15117

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
Volatile Compounds							
Vinyl Chloride	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
Pesticides							
Aldrin	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
alpha-BHC	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
beta-BHC	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
delta-BHC	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
gamma-BHC (Lindane)	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
Chlordane	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
4,4p-DDT	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
4,4p-DDE	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
4,4p-DDD	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
Dieldrin	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
alpha-Endosulfan	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
beta-Endosulfan	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
Endosulfan sulfate	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
Endrin	RAH	6/23/2005	EPA 608		0.001	Not Detected	mg/l
Endrin aldehyde	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
Heptachlor	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
Heptachlor epoxide	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
PCB, Aroclor 1242	RAH	6/23/2005	EPA 608		0.005	Not Detected	mg/l
PCB, Aroclor 1254	RAH	6/23/2005	EPA 608		0.005	Not Detected	mg/l
PCB, Aroclor 1221	RAH	6/23/2005	EPA 608		0.005	Not Detected	mg/l
PCB, Aroclor 1232	RAH	6/23/2005	EPA 608		0.005	Not Detected	mg/l
PCB, Aroclor 1248	RAH	6/23/2005	EPA 608		0.005	Not Detected	mg/l
PCB, Aroclor 1260	RAH	6/23/2005	EPA 608		0.005	Not Detected	mg/l
PCB, Aroclor 1016	RAH	6/23/2005	EPA 608		0.005	Not Detected	mg/l
Toxaphene	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments: COMPOSITE SAMPLE.

Note:

Cr analysis performed by analyst JA3 is TOTAL RECOVERABLE,
and analysis performed by FKK is Total Cr (01034).

CCS - 8/15/05

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____

Date: 15-Aug-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPK
Sample Date : 07-Jun-05
Customer ID : AL-0024619
Delivery Date : 07-Jun-05

Description: FNP - Intake Water
Repermitting Composite Sample

Laboratory ID Number: AJ15117

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
Metals, Cyanide, Total Phenols							
Aluminum, Total	JA3	6/17/2005	EPA 200.7		0.018	1.26	mg/l
Antimony, Total	JA3	6/17/2005	EPA 200.7		0.012	Not Detected	mg/l
Arsenic, Total	JA3	6/17/2005	EPA 200.7		0.005	Not Detected	mg/l
Barium, Total	JA3	6/17/2005	EPA 200.7		0.002	0.030	mg/l
Beryllium, Total	JA3	6/17/2005	EPA 200.7		0.001	Not Detected	mg/l
Boron, Total	JA3	6/17/2005	EPA 200.7		0.003	0.010	mg/l
Cadmium, Total	JA3	6/17/2005	EPA 200.7		0.002	Not Detected	mg/l
Chromium, Total	JA3	6/17/2005	EPA 200.7		0.001	0.002	mg/l
Chromium, Total	FKK	8/12/2005	EPA 200.7		0.001	Not Detected	mg/l
Cobalt, Total	JA3	6/17/2005	EPA 200.7		0.004	Not Detected	mg/l
Copper, Total	JA3	6/17/2005	EPA 200.7		0.005	0.005	mg/l
Iron, Total	JA3	6/17/2005	EPA 200.7		0.003	1.54	mg/l
Lead, Total	JA3	6/17/2005	EPA 200.7		0.004	Not Detected	mg/l
Magnesium, Total	JA3	6/17/2005	EPA 200.7		0.026	1.74	mg/l
Manganese, Total	JA3	6/17/2005	EPA 200.7		0.004	0.182	mg/l
Mercury, Total	RDA	6/9/2005	EPA 245.1		0.0002	Not Detected	mg/l
Molybdenum, Total	JA3	6/17/2005	EPA 200.7		0.01	Not Detected	mg/l
Nickel, Total	JA3	6/17/2005	EPA 200.7		0.004	Not Detected	mg/l
Selenium, Total	JA3	6/17/2005	EPA 200.7		0.005	Not Detected	mg/l
Silver, Total	JA3	6/17/2005	EPA 200.7		0.006	Not Detected	mg/l
Thallium, Total	JA3	6/17/2005	EPA 200.7		0.007	Not Detected	mg/l
Tin, Total	JA3	6/17/2005	EPA 200.7		0.002	0.004	mg/l
Titanium, Total	JA3	6/17/2005	EPA 200.7		0.003	0.028	mg/l
Zinc - Total	JA3	6/17/2005	EPA 200.7		0.004	0.005	mg/l
General Characteristics							
Biochemical Oxygen Demand, 5 Day	HRG	6/13/2005	SM 5210B		2.	Not Detected	mg/l
Chemical Oxygen Demand	RDA	6/23/2005	EPA 410.4		1.	4	mg/l
Total Organic Carbon	KRC	6/10/2005	EPA 415.1		0.30	2.27	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments: COMPOSITE SAMPLE.

Note:

Cr analysis performed by analyst JA3 is TOTAL RECOVERABLE,
and analysis performed by FKK is Total Cr (01034).

CCS - 8/15/05

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ **Supervision** _____

Date: 15-Aug-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPIKTK
Sample Date : 07-Jun-05
Customer ID : AL-0024619
Delivery Date : 07-Jun-05

Description: FNP - Intake Water
Repermitting Composite Sample

Laboratory ID Number: AJ15117

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
General Characteristics							
Solids - Suspended	HRG	6/9/2005	EPA 160.2		1.	9.	mg/l
Nitrogen, Ammonia	EMH	6/10/2005	EPA 350.1		0.01	0.11	mg/l as N
Bromide	EMH	6/27/2005	EPA 300.0		0.02	Not Detected	mg/l
Color	HRG	6/8/2005	EPA 110.3		0.	17.	PCU
Fluoride	EMH	6/16/2005	EPA 340.2		0.02	0.12	mg/l
Nitrogen, Nitrate/Nitrite	EMH	6/8/2005	353.2/CALC		0.01	0.380	mg/l as N
Nitrogen, Total Organic	EMH	6/10/2005	EPA 351.3		0.01	0.350	mg/l as N
Phosphorus, Total	HRG	6/14/2005	EPA 365.2		0.01	0.12	mg/l as P
Sulfate	EMH	6/27/2005	EPA 300.0		1.0	6.05	mg/l
Sulfide	FKK	6/14/2005	EPA 376.2		0.01	0.06	mg/l
Sulfite	FKK	6/8/2005	EPA 377.1		0.25	Not Detected	mg/l
Surfactants (Foaming Agents)	RDA	6/8/2005	EPA 425.1		0.01	0.02	mg/l
Nitrogen, Nitrate	EMH	6/8/2005	EPA 353.2		0.01	0.37	mg/l as N
Nitrogen, Nitrite	EMH	6/8/2005	EPA 353.2		0.01	0.01	mg/l as N
Nitrogen, Total Kjeldahl	EMH	6/15/2005	EPA 351.2		0.01	0.46	mg/l as N
Base/Neutral Compounds							
Acenaphthene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Acenaphthylene	RAH	6/29/2005	EPA 625		0.0035	Not Detected	mg/l
Anthracene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Benzidine	RAH	6/29/2005	EPA 625		0.044	Not Detected	mg/l
Benzo(a)anthracene	RAH	6/29/2005	EPA 625		0.0078	Not Detected	mg/l
Benzo(a)pyrene	RAH	6/29/2005	EPA 625		0.0025	Not Detected	mg/l
3,4-Benzofluoranthene	RAH	6/29/2005	EPA 625		0.0048	Not Detected	mg/l
Benzo(g,h,i)perylene	RAH	6/29/2005	EPA 625		0.0041	Not Detected	mg/l
Benzo(k)fluoranthene	RAH	6/29/2005	EPA 625		0.0025	Not Detected	mg/l
Bis(2-chloroethoxy)methane	RAH	6/29/2005	EPA 625		0.0053	Not Detected	mg/l
Bis(2-chloroethyl)ether	RAH	6/29/2005	EPA 625		0.0057	Not Detected	mg/l
Bis(2-chloroisopropyl)ether	RAH	6/29/2005	EPA 625		0.0057	Not Detected	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments: COMPOSITE SAMPLE.

Note:

Cr analysis performed by analyst JA3 is TOTAL RECOVERABLE,
and analysis performed by FKK is Total Cr (01034).

CCS - 8/15/05

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____

Date: 15-Aug-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPIINTK
Sample Date : 07-Jun-05
Customer ID : AL-0024619
Delivery Date : 07-Jun-05

Description: FNP - Intake Water
Repermitting Composite Sample

Laboratory ID Number: AJ15117

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
<i>Base/Neutral Compounds</i>							
Bis(2-ethylhexyl)phthalate	RAH	6/29/2005	EPA 625		0.0025	0.0084	mg/l
4-Bromophenyl phenyl ether	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Butyl benzyl phthalate	RAH	6/29/2005	EPA 625		0.0025	Not Detected	mg/l
2-Chloronaphthalene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
4-Chlorophenyl phenyl ether	RAH	6/29/2005	EPA 625		0.0042	Not Detected	mg/l
Chrysene	RAH	6/29/2005	EPA 625		0.0025	Not Detected	mg/l
Dibenzo(a,h)anthracene	RAH	6/29/2005	EPA 625		0.0025	Not Detected	mg/l
1,2-Dichlorobenzene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
1,3-Dichlorobenzene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
1,4-Dichlorobenzene	RAH	6/29/2005	EPA 625		0.0044	Not Detected	mg/l
3,3p-Dichlorobenzidine	RAH	6/29/2005	EPA 625		0.0165	Not Detected	mg/l
Diethyl phthalate	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Dimethyl phthalate	RAH	6/29/2005	EPA 625		0.0016	Not Detected	mg/l
Di-n-butylphthalate	RAH	6/29/2005	EPA 625		0.0025	Not Detected	mg/l
2,4-Dinitrotoluene	RAH	6/29/2005	EPA 625		0.0057	Not Detected	mg/l
2,6-Dinitrotoluene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Di-n-octylphthalate	RAH	6/29/2005	EPA 625		0.0025	Not Detected	mg/l
1,2-Diphenylhydrazine	RAH	6/29/2005	EPA 625		0.003	Not Detected	mg/l
Fluoranthene	RAH	6/29/2005	EPA 625		0.0022	Not Detected	mg/l
Fluorene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Hexachlorobenzene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Hexachlorobutadiene	RAH	6/29/2005	EPA 625		0.0009	Not Detected	mg/l
Hexachlorocyclopentadiene	RAH	6/29/2005	EPA 625		0.001	Not Detected	mg/l
Hexachloroethane	RAH	6/29/2005	EPA 625		0.0016	Not Detected	mg/l
Indeno(1,2,3-cd)pyrene	RAH	6/29/2005	EPA 625		0.0037	Not Detected	mg/l
Isophorone	RAH	6/29/2005	EPA 625		0.0022	Not Detected	mg/l
Naphthalene	RAH	6/29/2005	EPA 625		0.0016	Not Detected	mg/l
Nitrobenzene	RAH	6/29/2005	EPA 625		0.002	Not Detected	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments: COMPOSITE SAMPLE.

Note:

Cr analysis performed by analyst JA3 is TOTAL RECOVERABLE,
and analysis performed by FKK is Total Cr (01034).

CCS - 8/15/05

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____

Date: 15-Aug-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPIKTK
Sample Date : 07-Jun-05
Customer ID : AL-0024619
Delivery Date : 07-Jun-05

Description: FNP - Intake Water
Repermitting Composite Sample

Laboratory ID Number: AJ15117

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
Base/Neutral Compounds							
N-Nitrosodimethylamine	RAH	6/29/2005	EPA 625		0.003	Not Detected	mg/l
N-Nitrosodi-n-propylamine	RAH	6/29/2005	EPA 625		0.002	Not Detected	mg/l
N-Nitrosodiphenylamine	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Phenanthrene	RAH	6/29/2005	EPA 625		0.0054	Not Detected	mg/l
Pyrene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
1,2,4-Trichlorobenzene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Acid Compounds							
2-Chlorophenol	RAH	6/29/2005	EPA 625		0.0033	Not Detected	mg/l
2,4-Dichlorophenol	RAH	6/29/2005	EPA 625		0.0027	Not Detected	mg/l
2,4-Dimethylphenol	RAH	6/29/2005	EPA 625		0.0027	Not Detected	mg/l
4,6-Dinitro-o-cresol	RAH	6/29/2005	EPA 625		0.024	Not Detected	mg/l
2,4-Dinitrophenol	RAH	6/29/2005	EPA 625		0.042	Not Detected	mg/l
2-Nitrophenol	RAH	6/29/2005	EPA 625		0.0036	Not Detected	mg/l
4-Nitrophenol	RAH	6/29/2005	EPA 625		0.0024	Not Detected	mg/l
P-Chloro-M-Cresol	RAH	6/29/2005	EPA 625		0.0030	Not Detected	mg/l
Pentachlorophenol	RAH	6/29/2005	EPA 625		0.0036	Not Detected	mg/l
Phenol	RAH	6/29/2005	EPA 625		0.0015	Not Detected	mg/l
2,4,6-Trichlorophenol	RAH	6/29/2005	EPA 625		0.0027	Not Detected	mg/l
Miscellaneous							
Method 625 - Extraction Date	RAH	6/13/2005				06/13/05	
Method 608 - Extraction Date	RAH	6/13/2005	DATE			06/13/05	

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments: COMPOSITE SAMPLE.

Note:

Cr analysis performed by analyst JA3 is TOTAL RECOVERABLE,
and analysis performed by FKK is Total Cr (01034).

CCS - 8/15/05

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____ Date: 15-Aug-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPIKTK
Sample Date : 07-Jun-05
Customer ID : AL-0024619
Delivery Date : 07-Jun-05

Description: FNP - Intake Water
Trip Blanks

Laboratory ID Number: AJ15118

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
<i>Volatile Compounds</i>							
Acrolein	JCC	6/9/2005	EPA 603		0.002	Not Detected	mg/l
Acrylonitrile	JCC	6/9/2005	EPA 603		0.001	Not Detected	mg/l
Benzene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Bromoform	RAH	6/15/2005	EPA 624		0.0030	Not Detected	mg/l
Carbon Tetrachloride	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Chlorobenzene	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
Chlorodibromomethane	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
Chloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
2-Chloroethylvinyl Ether	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
Chloroform	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Dichlorobromomethane	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
1,1-Dichloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
1,2-Dichloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
1,1-Dichloroethylene	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
1,2-Dichloropropane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
cis-1,3-Dichloropropylene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
trans-1,3-Dichloropropylene	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
Ethylbenzene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Methyl Bromide	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Methyl Chloride	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Methylene Chloride	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
1,1,2,2-Tetrachloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Tetrachloroethylene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Toluene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
1,2-trans-Dichloroethylene	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
1,1,1-Trichloroethane	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
1,1,2-Trichloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Trichloroethylene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments:

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____

Date: 09-Jul-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPIK
Sample Date : 07-Jun-05
Customer ID : AL-0024619
Delivery Date : 07-Jun-05

Description: FNP - Intake Water
Trip Blanks

Laboratory ID Number: AJ15118

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
<i>Volatile Compounds</i>							
Vinyl Chloride	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments:

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____

Date: 09-Jul-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPDISC
Sample Date : 05-May-05
Customer ID : AL-0024619
Delivery Date : 05-May-05

Description: FNP -Discharge
Repermitting - Grab Sample

Laboratory ID Number: AJ12233

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
<i>General Characteristics</i>							
Flow	KD	5/5/2005	Field Test		0.000	69.12	MGD
Field pH	RKB	5/5/2005	EPA 150.1		0.00	7.02	SU
Temperature	MAR	5/5/2005	Field Data		0.	23	Deg. C.
Chlorine, Total Residual	RKB	5/5/2005	Field Test		0.01	Not Detected	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments:

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____

Date: 18-May-05

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPDISC
Sample Date : 05-May-05
Customer ID : AL-0024619
Delivery Date : 05-May-05

Description: FNP -Discharge
Repermitting - Grab Sample

Laboratory ID Number: AJ12231

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
<i>Metals, Cyanide, Total Phenols</i>							
Cyanide, Total	HRG	5/11/2005	EPA 335.2		0.005	Not Detected	mg/l
Phenol, Total	HRG	5/19/2005	EPA 420.1		0.01	0.01	mg/l
<i>General Characteristics</i>							
Coliform - Fecal	HRG	5/6/2005	SM 9222D		1.	Not Detected	colonies/100
Oil and Grease	RDA	5/10/2005	EPA 1664		1.4	Not Detected	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as submitted.

Comments:

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____

Date: 25-May-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPDISC
Sample Date : 07-Jun-05
Customer ID : AL-0024619
Delivery Date : 07-Jun-05

Description: FNP -Discharge
Repermitting Composite Sample

Laboratory ID Number: AJ15119

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
<i>Volatile Compounds</i>							
Acrolein	JCC	6/9/2005	EPA 603		0.002	Not Detected	mg/l
Acrylonitrile	JCC	6/9/2005	EPA 603		0.001	Not Detected	mg/l
Benzene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Bromoform	RAH	6/15/2005	EPA 624		0.0030	Not Detected	mg/l
Carbon Tetrachloride	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Chlorobenzene	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
Chlorodibromomethane	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
Chloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
2-Chloroethylvinyl Ether	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
Chloroform	RAH	6/15/2005	EPA 624		0.0020	0.0022	mg/l
Dichlorobromomethane	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
1,1-Dichloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
1,2-Dichloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
1,1-Dichloroethylene	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
1,2-Dichloropropane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
cis-1,3-Dichloropropylene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
trans-1,3-Dichloropropylene	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
Ethylbenzene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Methyl Bromide	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Methyl Chloride	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Methylene Chloride	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
1,1,2,2-Tetrachloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Tetrachloroethylene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Toluene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
1,2-trans-Dichloroethylene	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
1,1,1-Trichloroethane	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
1,1,2-Trichloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Trichloroethylene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments: COMPOSITE SAMPLE.

Note:

Cr analysis performed by analyst JA3 is TOTAL RECOVERABLE,
and analysis performed by FKK is Total Cr (01034).

CCS - 8/15/05

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ **Supervision** _____

Date: 15-Aug-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPDISC
Sample Date : 07-Jun-05
Customer ID : AL-0024619
Delivery Date : 07-Jun-05

Description: FNP -Discharge
Repermitting Composite Sample

Laboratory ID Number: AJ15119

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
<i>Volatile Compounds</i>							
Vinyl Chloride	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
<i>Pesticides</i>							
Aldrin	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
alpha-BHC	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
beta-BHC	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
delta-BHC	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
gamma-BHC (Lindane)	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
Chlordane	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
4,4p-DDT	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
4,4p-DDE	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
4,4p-DDD	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
Dieldrin	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
alpha-Endosulfan	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
beta-Endosulfan	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
Endosulfan sulfate	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
Endrin	RAH	6/23/2005	EPA 608		0.001	Not Detected	mg/l
Endrin aldehyde	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
Heptachlor	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
Heptachlor epoxide	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l
PCB, Aroclor 1242	RAH	6/23/2005	EPA 608		0.005	Not Detected	mg/l
PCB, Aroclor 1254	RAH	6/23/2005	EPA 608		0.005	Not Detected	mg/l
PCB, Aroclor 1221	RAH	6/23/2005	EPA 608		0.005	Not Detected	mg/l
PCB, Aroclor 1232	RAH	6/23/2005	EPA 608		0.005	Not Detected	mg/l
PCB, Aroclor 1248	RAH	6/23/2005	EPA 608		0.005	Not Detected	mg/l
PCB, Aroclor 1260	RAH	6/23/2005	EPA 608		0.005	Not Detected	mg/l
PCB, Aroclor 1016	RAH	6/23/2005	EPA 608		0.005	Not Detected	mg/l
Toxaphene	RAH	6/23/2005	EPA 608		0.003	Not Detected	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments: COMPOSITE SAMPLE.

Note:

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and analysis performed by FKK is Total Cr (01034).

CCS - 8/15/05

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ **Supervision** _____

Date: 15-Aug-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPDISC
Sample Date : 07-Jun-05
Customer ID : AL-0024619
Delivery Date : 07-Jun-05

Description: FNP -Discharge
Repermitting Composite Sample

Laboratory ID Number: AJ15119

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
Metals, Cyanide, Total Phenols							
Aluminum, Total	JA3	6/17/2005	EPA 200.7		0.018	1.27	mg/l
Antimony, Total	JA3	6/17/2005	EPA 200.7		0.012	Not Detected	mg/l
Arsenic, Total	JA3	6/17/2005	EPA 200.7		0.005	Not Detected	mg/l
Barium, Total	JA3	6/17/2005	EPA 200.7		0.002	0.030	mg/l
Beryllium, Total	JA3	6/17/2005	EPA 200.7		0.001	Not Detected	mg/l
Boron, Total	JA3	6/17/2005	EPA 200.7		0.003	0.060	mg/l
Cadmium, Total	JA3	6/17/2005	EPA 200.7		0.002	Not Detected	mg/l
Chromium, Total	JA3	6/17/2005	EPA 200.7		0.001	Not Detected	mg/l
Chromium, Total	FKK	8/12/2005	EPA 200.7		0.001	Not Detected	mg/l
Cobalt, Total	JA3	6/17/2005	EPA 200.7		0.004	Not Detected	mg/l
Copper, Total	JA3	6/17/2005	EPA 200.7		0.005	0.009	mg/l
Iron, Total	JA3	6/17/2005	EPA 200.7		0.003	1.30	mg/l
Lead, Total	JA3	6/17/2005	EPA 200.7		0.004	Not Detected	mg/l
Magnesium, Total	JA3	6/17/2005	EPA 200.7		0.026	1.90	mg/l
Manganese, Total	JA3	6/17/2005	EPA 200.7		0.004	0.099	mg/l
Mercury, Total	RDA	6/9/2005	EPA 245.1		0.0002	Not Detected	mg/l
Molybdenum, Total	JA3	6/17/2005	EPA 200.7		0.01	Not Detected	mg/l
Nickel, Total	JA3	6/17/2005	EPA 200.7		0.004	Not Detected	mg/l
Selenium, Total	JA3	6/17/2005	EPA 200.7		0.005	Not Detected	mg/l
Silver, Total	JA3	6/17/2005	EPA 200.7		0.006	Not Detected	mg/l
Thallium, Total	JA3	6/17/2005	EPA 200.7		0.007	Not Detected	mg/l
Tin, Total	JA3	6/17/2005	EPA 200.7		0.002	Not Detected	mg/l
Titanium, Total	JA3	6/17/2005	EPA 200.7		0.003	0.030	mg/l
Zinc - Total	JA3	6/17/2005	EPA 200.7		0.004	0.011	mg/l
General Characteristics							
Biochemical Oxygen Demand, 5 Day	HRG	6/13/2005	SM 5210B		2.	Not Detected	mg/l
Chemical Oxygen Demand	RDA	6/23/2005	EPA 410.4		1.	4	mg/l
Total Organic Carbon	KRC	6/10/2005	EPA 415.1		0.30	2.43	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments: COMPOSITE SAMPLE.

Note:

Cr analysis performed by analyst JA3 is TOTAL RECOVERABLE,
and analysis performed by FKK is Total Cr (01034).

CCS - 8/15/05

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____

Date: 15-Aug-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPDISC
Sample Date : 07-Jun-05
Customer ID : AL-0024619
Delivery Date : 07-Jun-05

Description: FNP -Discharge
Repermitting Composite Sample

Laboratory ID Number: AJ15119

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
General Characteristics							
Solids - Suspended	HRG	6/9/2005	EPA 160.2		1.	12.	mg/l
Nitrogen, Ammonia	EMH	6/10/2005	EPA 350.1		0.01	0.16	mg/l as N
Bromide	EMH	6/27/2005	EPA 300.0		0.02	Not Detected	mg/l
Color	HRG	6/8/2005	EPA 110.3		0.	28.	PCU
Fluoride	EMH	6/16/2005	EPA 340.2		0.02	0.12	mg/l
Nitrogen, Nitrate/Nitrite	EMH	6/8/2005	353.2/CALC		0.01	0.500	mg/l as N
Nitrogen, Total Organic	EMH	6/10/2005	EPA 351.3		0.01	0.330	mg/l as N
Phosphorus, Total	HRG	6/14/2005	EPA 365.2		0.01	0.13,	mg/l as P
Sulfate	EMH	6/27/2005	EPA 300.0		1.0	7.96	mg/l
Sulfide	FKK	6/14/2005	EPA 376.2		0.01	0.13	mg/l
Sulfite	FKK	6/8/2005	EPA 377.1		0.25	Not Detected	mg/l
Surfactants (Foaming Agents)	RDA	6/8/2005	EPA 425.1		0.01	0.01	mg/l
Nitrogen, Nitrate	EMH	6/8/2005	EPA 353.2		0.01	0.49	mg/l as N
Nitrogen, Nitrite	EMH	6/8/2005	EPA 353.2		0.01	0.01	mg/l as N
Nitrogen, Total Kjeldahl	EMH	6/15/2005	EPA 351.2		0.01	0.49	mg/l as N
Base/Neutral Compounds							
Acenaphthene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Acenaphthylene	RAH	6/29/2005	EPA 625		0.0035	Not Detected	mg/l
Anthracene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Benzidine	RAH	6/29/2005	EPA 625		0.044	Not Detected	mg/l
Benzo(a)anthracene	RAH	6/29/2005	EPA 625		0.0078	Not Detected	mg/l
Benzo(a)pyrene	RAH	6/29/2005	EPA 625		0.0025	Not Detected	mg/l
3,4-Benzofluoranthene	RAH	6/29/2005	EPA 625		0.0048	Not Detected	mg/l
Benzo(g,h,i)perylene	RAH	6/29/2005	EPA 625		0.0041	Not Detected	mg/l
Benzo(k)fluoranthene	RAH	6/29/2005	EPA 625		0.0025	Not Detected	mg/l
Bis(2-chloroethoxy)methane	RAH	6/29/2005	EPA 625		0.0053	Not Detected	mg/l
Bis(2-chloroethyl)ether	RAH	6/29/2005	EPA 625		0.0057	Not Detected	mg/l
Bis(2-chloroisopropyl)ether	RAH	6/29/2005	EPA 625		0.0057	Not Detected	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments: COMPOSITE SAMPLE.

Note:

Cr analysis performed by analyst JA3 is TOTAL RECOVERABLE,
and analysis performed by FKK is Total Cr (01034).

CCS - 8/15/05

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____

Date: 15-Aug-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPDISC
Sample Date : 07-Jun-05
Customer ID : AL-0024619
Delivery Date : 07-Jun-05

Description: FNP -Discharge
Repermitting Composite Sample

Laboratory ID Number: AJ15119

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
<i>Base/Neutral Compounds</i>							
Bis(2-ethylhexyl)phthalate	RAH	6/29/2005	EPA 625		0.0025	Not Detected	mg/l
4-Bromophenyl phenyl ether	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Butyl benzyl phthalate	RAH	6/29/2005	EPA 625		0.0025	Not Detected	mg/l
2-Chloronaphthalene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
4-Chlorophenyl phenyl ether	RAH	6/29/2005	EPA 625		0.0042	Not Detected	mg/l
Chrysene	RAH	6/29/2005	EPA 625		0.0025	Not Detected	mg/l
Dibenzo(a,h)anthracene	RAH	6/29/2005	EPA 625		0.0025	Not Detected	mg/l
1,2-Dichlorobenzene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
1,3-Dichlorobenzene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
1,4-Dichlorobenzene	RAH	6/29/2005	EPA 625		0.0044	Not Detected	mg/l
3,3p-Dichlorobenzidine	RAH	6/29/2005	EPA 625		0.0165	Not Detected	mg/l
Diethyl phthalate	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Dimethyl phthalate	RAH	6/29/2005	EPA 625		0.0016	Not Detected	mg/l
Di-n-butylphthalate	RAH	6/29/2005	EPA 625		0.0025	Not Detected	mg/l
2,4-Dinitrotoluene	RAH	6/29/2005	EPA 625		0.0057	Not Detected	mg/l
2,6-Dinitrotoluene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Di-n-octylphthalate	RAH	6/29/2005	EPA 625		0.0025	Not Detected	mg/l
1,2-Diphenylhydrazine	RAH	6/29/2005	EPA 625		0.003	Not Detected	mg/l
Fluoranthene	RAH	6/29/2005	EPA 625		0.0022	Not Detected	mg/l
Fluorene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Hexachlorobenzene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Hexachlorobutadiene	RAH	6/29/2005	EPA 625		0.0009	Not Detected	mg/l
Hexachlorocyclopentadiene	RAH	6/29/2005	EPA 625		0.001	Not Detected	mg/l
Hexachloroethane	RAH	6/29/2005	EPA 625		0.0016	Not Detected	mg/l
Indeno(1,2,3-cd)pyrene	RAH	6/29/2005	EPA 625		0.0037	Not Detected	mg/l
Isophorone	RAH	6/29/2005	EPA 625		0.0022	Not Detected	mg/l
Naphthalene	RAH	6/29/2005	EPA 625		0.0016	Not Detected	mg/l
Nitrobenzene	RAH	6/29/2005	EPA 625		0.002	Not Detected	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments: COMPOSITE SAMPLE.

Note:

Cr analysis performed by analyst JA3 is TOTAL RECOVERABLE,
and analysis performed by FKK is Total Cr (01034).

CCS - 8/15/05

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____

Date: 15-Aug-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPDISC
Sample Date : 07-Jun-05
Customer ID : AL-0024619
Delivery Date : 07-Jun-05

Description: FNP -Discharge
Repermitting Composite Sample

Laboratory ID Number: AJ15119

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
Base/Neutral Compounds							
N-Nitrosodimethylamine	RAH	6/29/2005	EPA 625		0.003	Not Detected	mg/l
N-Nitrosodi-n-propylamine	RAH	6/29/2005	EPA 625		0.002	Not Detected	mg/l
N-Nitrosodiphenylamine	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Phenanthrene	RAH	6/29/2005	EPA 625		0.0054	Not Detected	mg/l
Pyrene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
1,2,4-Trichlorobenzene	RAH	6/29/2005	EPA 625		0.0019	Not Detected	mg/l
Acid Compounds							
2-Chlorophenol	RAH	6/29/2005	EPA 625		0.0033	Not Detected	mg/l
2,4-Dichlorophenol	RAH	6/29/2005	EPA 625		0.0027	Not Detected	mg/l
2,4-Dimethylphenol	RAH	6/29/2005	EPA 625		0.0027	Not Detected	mg/l
4,6-Dinitro-o-cresol	RAH	6/29/2005	EPA 625		0.024	Not Detected	mg/l
2,4-Dinitrophenol	RAH	6/29/2005	EPA 625		0.042	Not Detected	mg/l
2-Nitrophenol	RAH	6/29/2005	EPA 625		0.0036	Not Detected	mg/l
4-Nitrophenol	RAH	6/29/2005	EPA 625		0.0024	Not Detected	mg/l
P-Chloro-M-Cresol	RAH	6/29/2005	EPA 625		0.0030	Not Detected	mg/l
Pentachlorophenol	RAH	6/29/2005	EPA 625		0.0036	Not Detected	mg/l
Phenol	RAH	6/29/2005	EPA 625		0.0015	Not Detected	mg/l
2,4,6-Trichlorophenol	RAH	6/29/2005	EPA 625		0.0027	Not Detected	mg/l
Miscellaneous							
Method 608 - Extraction Date	RAH	6/13/2005	DATE			06/13/05	
Method 625 - Extraction Date	RAH	6/13/2005				06/13/05	

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments: COMPOSITE SAMPLE.

Note:

Cr analysis performed by analyst JA3 is TOTAL RECOVERABLE,
and analysis performed by FKK is Total Cr (01034).

CCS - 8/15/05

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ **Supervision** _____

Date: 15-Aug-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPDISC
Sample Date : 07-Jun-05
Customer ID : AL-0024619
Delivery Date : 07-Jun-05

Description: FNP -Discharge
Trip Blanks

Laboratory ID Number: AJ15120

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
<i>Volatile Compounds</i>							
Acrolein	JCC	6/9/2005	EPA 603		0.002	Not Detected	mg/l
Acrylonitrile	JCC	6/9/2005	EPA 603		0.001	Not Detected	mg/l
Benzene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Bromoform	RAH	6/15/2005	EPA 624		0.0030	Not Detected	mg/l
Carbon Tetrachloride	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Chlorobenzene	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
Chlorodibromomethane	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
Chloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
2-Chloroethylvinyl Ether	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
Chloroform	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Dichlorobromomethane	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
1,1-Dichloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
1,2-Dichloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
1,1-Dichloroethylene	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
1,2-Dichloropropane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
cis-1,3-Dichloropropylene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
trans-1,3-Dichloropropylene	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
Ethylbenzene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Methyl Bromide	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Methyl Chloride	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Methylene Chloride	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
1,1,2,2-Tetrachloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Tetrachloroethylene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Toluene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
1,2-trans-Dichloroethylene	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
1,1,1-Trichloroethane	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l
1,1,2-Trichloroethane	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l
Trichloroethylene	RAH	6/15/2005	EPA 624		0.0020	Not Detected	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments:

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____

Date: 09-Jul-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPDISC
Sample Date : 07-Jun-05
Customer ID : AL-0024619
Delivery Date : 07-Jun-05

Description: FNP -Discharge
Trip Blanks

Laboratory ID Number: AJ15120

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
<i>Volatile Compounds</i>							
Vinyl Chloride	RAH	6/15/2005	EPA 624		0.0010	Not Detected	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments:

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____

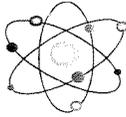
Date: 09-Jul-05



Florida Radiochemistry Services, Inc.

Sample Login

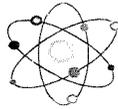
Client:	Alabama Power Co. General Test Lab	Date / Time Received 06/23/05 08:44	Work order # 0506193
Client Contact:	Chris Stolz		
Client P.O.	6282		
Project I.D.			
Lab Sample I.D.	Client Sample I.D.	Sample Date/Time	Analysis Requested
0506193-01	AJ15117	06/07/05 10:00	Ga, Gb, Ra226, Tra
0506193-02	AJ15119	06/07/05 10:42	Ga, Gb, Ra226, Tra



Florida Radiochemistry Services, Inc.

Analysis Report

Lab Sample I.D.	0506193-01	0506193-02
Client I.D.	AJ15117	AJ15119
Gross Alpha	<0.6	<0.8
Error +/-	0.4	0.5
MDL	0.6	0.8
EPA Method	900.0	900.0
Prep Date	07/05/05	07/05/05
Analysis Date	07/06/05	07/06/05
Analyst	MJN	MJN
Gross Beta	3.0	2.8
Error +/-	1.0	1.1
MDL	1.5	1.6
EPA Method	900.0	900.0
Prep Date	07/05/05	07/05/05
Analysis Date	07/06/05	07/06/05
Analyst	MJN	MJN
Radium 226	0.1	0.3
Error +/-	0.1	0.1
MDL	0.1	0.2
EPA Method	903.1	903.1
Prep Date	06/30/05	06/30/05
Analysis Date	07/08/05	07/08/05
Analyst	MJN	MJN
Total Radium	<0.9	<0.9
Error +/-	0.5	0.6
MDL	0.9	0.9
EPA Method	903.0	903.0
Prep Date	07/07/05	07/07/05
Analysis Date	07/08/05	07/08/05
Analyst	MJN	MJN
Units	pCi/l	pCi/l



Florida Radiochemistry Services, Inc.

QA Page

Analyte	Sample #	Date Analyzed	Sample Result	Amount Spiked	Spike Result	Spike /Dup Result	Spike % Rec.	Spike Dup % Rpd
Gross Alpha	0506253-02	07/06/05	<0.9	10.2	8.4	9.8	82	15.4
Gross Beta	0506253-02	07/06/05	2.2	12.6	13.8	14.5	92	4.9
Radium 226	0506206-05	07/08/05	19.1	25.2	40.3	42.0	84	4.1
Total Radium	0506206-05	07/08/05	19.1	34.3	49.1	51.4	87	4.6

	Quality	Control	Limits
	% RPD		% Rec.
Gross Alpha	18.1		68-116
Gross Beta	16.2		78-119
Radium 226	24.8		67-125
Total Radium	17.4		77-121

Attachment 3 to U.S. EPA Form 3510-2C

**Corrosion Inhibitors, Biocides, and
Other Chemical Products In Use**

**Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619**

**Corrosion Inhibitors, Biocides, and Chemical Treatments
Used at Farley Nuclear Plant**

Service Water System – Units 1 & 2 (Service Water Intake Structure)

Sodium Hypochlorite

Added to maintain concentrations adequate to control Corbicula (Asiatic clams) in the service water system. Rate is controlled to assure that TRC values are in compliance with permit discharge limits at the Main Combined Facility Discharge (DSN001).

Ammonium Bisulfite

Ammonium bisulfite is utilized as a dechlorination agent to dechlorinate residual chlorine present in Service Water due to cooling tower blowdown. Sufficient ammonium bisulfite is added to dechlorinate the amount of residual chlorine present in cooling tower blowdown, plus some excess to ensure dechlorination during any transients that may occur. Refer to EPA Form 3510-2C Attachment 6 for additional information regarding the chlorination/dechlorination program.

Circulating Water System – Units 1 & 2

Sodium Hypochlorite

Added to maintain concentrations adequate to control biofouling in the circulating water system. Farley is currently continuously adding sodium hypochlorite to maintain a constant residual of approximately 0.50 mg/l Free Available Chlorine (FAC) within the cooling towers. Cooling tower blowdown is continuously dechlorinated using ammonium bisulfite at the Service Water surge tank on each unit. Refer to EPA Form 3510-2C Attachment 6 for additional information regarding the chlorination/dechlorination program.

Depositrol BL5302

Depositrol BL5302 is a solution of HPS-1 copolymer (sodium polyacrylate) and HEDP used for scale control and as a dispersant in the circulating water system. Depositrol BL5302 is added as needed for scale and solids control. When added, a target value of 2 ppm of product in the circulating water system is maintained.

Spectrus CT1300

Spectrus CT1300 is an aqueous solution of proprietary quarternary ammonium compound that is added as needed for biofouling control in the cooling towers.

Foamtrol AF1441

Foamtrol AF1441 is a proprietary blend of surface active agents added as needed to control foam in the circulating water system.

Reactor Coolant System

Lithium Hydroxide

Added at a rate to maintain approximately 0.20 – 4.36 ppm concentration in the reactor coolant system.

Boric Acid

Added to achieve a maximum of approximately 2,500 ppm in the reactor coolant system.

Hydrogen Peroxide

Treatment during unit shutdown uses approximately 40 quarts.

Hydrazine

Treatment during unit startup uses approximately 5 quarts.

Zinc Acetate

Currently added to maintain approximately 5 – 35 ppb zinc in the reactor coolant system.

Secondary System Chemical Control

Hydrazine

Added as needed to maintain approximately 110 – 150 ppb concentration in the secondary system. During wet lay-up process, hydrazine concentration is maintained at 75 – 500 ppm in the steam generators.

Ethanolamine (ETA)

Added as needed to the secondary system to maintain a concentration of approximately 0.5 – 4.0 ppm.

Ammonium Chloride

Added as needed to the secondary system at a rate of approximately 0.05 – 0.30 ml/min of a 10 – 40 ppm chloride solution.

Component Cooling Water System

Potassium Chromate

Added as needed to maintain approximately 175 – 1,000 ppm concentration with 400 ppm as the normal range for corrosion control.

Potassium Dichromate

Added as needed in the system for pH control.

Potassium Hydroxide

Added as needed in the system for pH control.

Service Building / Turbine Building HVAC Systems

Drewguard 4109 Corrosion Treatment (4% Sodium Nitrite Solution)

Added as needed in systems to maintain approximately 300 – 1,400 ppm concentration.

Diesel Generator Jacket Water System

Drewguard 4109

Added as needed to maintain approximately 500 – 1,000 ppm concentration in the system.

BIOSPERSE 254

Previously approved for use by ADEM (July 29, 1992) in the system as an antimicrobial product for control of slime-forming/sulfate-reducing bacteria and algae. This product is not currently in use at FNP but may be utilized in the future.

Drew WPD 11-166 (Tolytriazole Buffered with Sodium Hydroxide)

Added as necessary for yellow metal corrosion control.

Sewage Treatment Plant

Calcium / Sodium Hypochlorite

Added in concentrations necessary to achieve sufficient residual to assure bacteriological control.

Sodium Hydroxide

Added in concentrations necessary for the purpose of alkalinity control.

Drinking Water System

Production & Construction Systems

Sodium hypochlorite added to maintain approximately 0.5 – 2.0 ppm FAC residual in systems.

Attachment 4 to U.S. EPA Form 3510-2C
Descriptive Information and Data for Water Uses

Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619

Descriptive Information and Data for Water Uses Farley Nuclear Plant

Introduction

Farley Nuclear Plant (FNP), located on the west bank of the Chattahoochee River at approximately river mile 44.3, consists of two generating units with a total nameplate rating of 1,776 megawatts. The plant provides approximately 15 to 20 percent of the power available to Alabama Power customers.

Service Water, which provides cooling and make-up water to both units, is withdrawn from a 95 acre Service Water Pond which is supplied from the Chattahoochee River. The FNP river water intake structure is located at the terminus of a 200 foot intake canal and delivers water from the Chattahoochee River to the Service Water Pond. During normal plant operation, the Service Water Pond stores water pumped from the river prior to use in the Service Water system. The Service Water system receives make-up from the Service Water intake structure located at the Service Water Pond. Service Water is pumped from the Service Water intake structure to the Plant to provide once-through cooling water to certain plant systems and make-up water to the water treatment plant and Circulating Water system. The Service Water Pond also provides the required cooling water storage capacity to accomplish and maintain simultaneous safe shutdown and cooldown conditions for both nuclear reactor units.

The discharges of Service Water from each unit are combined and carried to the plant discharge structure (DSN001) by a single 60 inch diameter pipe.

The FNP Circulating Water system consists of counterflow mechanical draft cooling towers which provide cooling for the main condensers. Make-up to the Circulating Water system is provided to replace water lost to cooling tower evaporation, drift, and blowdown. Blowdown is mixed with once-through Service Water and routed for discharge via DSN001.

The water treatment plant provides high purity water to the reactors and steam generators.

A 100,000 GPD sewage treatment plant provides treatment of sanitary wastes at FNP.

NOTE:

The following information provides detail on water use at FNP required for the NPDES Permit renewal application. The information is categorized by plant system. Current NPDES point source designations are indicated in parentheses.

River Water System

River Water Intake – North and South

FPN withdraws water from the Chattahoochee River for cooling and other plant uses via a 200 foot intake canal. The river water intake structure contains two (2) sections, each housing five (5) pumps with a total capacity of approximately 48,750 gpm. The river water pumps provide water to a storage pond for plant use. The pumps also provide water for river water screen backwash, pump cooling, and filter backwash.

River Water Intake Screen Backwash – North and South (DSN030)

The screens are backwashed, as necessary, at different intervals during the day. Material removed from the screens during backwashing is disposed, as necessary, in a solid waste landfill. The screen backwash water is returned to the intake canal. The average flow combined for both units is 45,000 GPD and the maximum flow is 140,000 GPD.

River Water Pumps Mini-Flow – South

The mini-flow provides pump protection by allowing a minimum flow from the pump discharge header to the wet pit. The average flow is approximately 1,440,000 GPD and the maximum flow is approximately 2,160,000 GPD.

River Water Pumps Mini-Flow – North

The mini-flow provides pump protection by allowing a minimum flow from the pump discharge header to the wet pit. The average flow is approximately 1,440,000 GPD and the maximum flow is approximately 2,160,000 GPD.

River Water Building Sump Discharge – South (DSN022) and North (DSN023)

All cooling water and leakage flows are routed to the building sump and are subsequently discharged to the Chattahoochee River. The average flow for DSN022 is approximately 22,000 GPD. The average flow for DSN023 is approximately 7,800 GPD. Flows are itemized below:

1. River Water Pumps Cooling Water

The cooling water is supplied from the river water pumps discharge header and is discharged to the building sump.

2. River Water Pumps Air Compressor Cooling Water

Air compressor cooling water is supplied from the river water pumps discharge header and is discharged through the building sump.

3. River Pumps Cooling Water-Filter Backwash Water

The backwash water is supplied from the river water pumps discharge header and flushes debris from the filter. The water is discharged to the building sump.

Service Water System

Service Water Intake Structure – Units 1 & 2

The FPN Service Water system withdraws water from the Service Water Pond for plant cooling and other plant uses. The Service Water system primarily provides cooling water for various plant systems. It also

provides water to the water treatment plant for production of high quality water for use in the reactors and steam supply systems. The components of the Service Water system are itemized below:

Service Water Intake Screen Backwash – Units 1 & 2

The intake screens are backwashed, as needed, at different intervals during the day. Material removed from the screens by backwashing is disposed in a solid waste landfill. The backwash water is routed back to the Service Water Pond.

Service Water Pumps Mini-Flow – Units 1 & 2

The mini-flow provides pump protection by allowing a minimum flow from the pump discharge header to the wet-pit.

Service Water Structure Sump Discharge – Units 1 & 2

All cooling waters and leakage flows are routed to the building sump and are subsequently discharged to the Southwest Yard Drainage (DSN029). The components which discharge to the building sump are itemized below:

1. Service Water Pump Cooling Water – Units 1 & 2

The cooling water is supplied from the Service Water pumps and is discharged to the building sump.

2. Service Water Pumps Air Compressor Cooling Water – Units 1 & 2

Air compressor cooling water is supplied from the Service Water pumps discharge header and is discharged to the building sump.

Once-Through Cooling Water System

This discharge is composed of the combined flows of service water used for plant equipment cooling. The components contributing to this discharge are itemized below:

1. Auxiliary Building and Containment Building Equipment Cooling Water – Units 1 & 2

Various equipment cooling waters in the auxiliary building and the containment building exchange heat to service water which is ultimately discharged as once-through cooling water via DSN001.

2. Diesel Generator Building Equipment Cooling Water – Units 1 & 2

This water provides cooling water for the emergency diesels and is discharged as once-through cooling water. The system is supplied by Service Water.

3. Turbine Building Equipment Cooling Water – Units 1 & 2

The Service Water system provides cooling water for various equipment heat exchangers in the turbine building. The water is ultimately discharged as once-through cooling water.

4. Dilution By-Pass – Units 1 & 2

By-pass lines in the Service Water system are provided to allow flow in excess of demand to be discharged in order to protect plant components from over-pressurization.

Turbine Building System

Turbine Building Sump – Units 1 & 2 (DSN015, DSN016)

This discharge consists of all drains, cooling waters, and leakage flows collected in the turbine building. The components contributing to this discharge are itemized below:

1. Turbine Building Chemistry Lab Drains – Units 1 & 2

Wastes from routine chemical analyses on the steam system are discharged to the Unit 2 turbine building sump.

2. Turbine Building Floor Drains – Units 1 & 2

The floor drain system collects equipment and valve leakage and routes it to the turbine building sump.

3. Condenser Circulating Water Box Drain – Units 1 & 2

This discharge is required periodically for maintenance of the condenser and for investigation of condenser tube leaks. This water is discharged to the turbine building sump.

4. Circulating Water Canal Drainage – Units 1 & 2

During outages maintenance may require drainage of the circulating water system. A portion of this drainage is routed to the turbine building sump.

5. Auxiliary Building Sumps – Units 1 & 2

The auxiliary building sumps collect water from equipment draining and valve leakoff. The sumps normally discharge to the turbine building sump.

6. Draining of Steam Generators – Units 1 & 2

During outages the steam generators may be drained through the turbine building sump.

Diesel Building System

Diesel Building Sump

Drains in the emergency diesel room are routed to a sump/oil-water separator outside the diesel building which is routed to the southeast yard drain (DSN024). Diesel building air compressor cooling water (Service Water) continuously flows through this discharge path. The components of this system currently are:

1. Floor Drain System

The floor drain system collects equipment and valve leakage and routes it to the diesel building sump.

2. Air compressor Cooling Water

Service Water provided as air compressor cooling water is routed to the diesel building sump.

Liquid Radwaste System

Liquid Radwaste System – Units 1 & 2 (DSN019, DSN020)

Reactor and auxiliary system leakages and other auxiliary building wastes which are not recyclable are processed, as necessary, to ensure that all discharges are well below the limits established by the Nuclear Regulatory Commission. This discharge is also processed, as necessary, to remove chromates. Boron, which is used in the reactor and auxiliary systems, may be discharged in very low concentrations via this system. This system ultimately discharges to the Chattahoochee River via DSN001.

1. Refueling Water Storage Tank Retention Area – Units 1 & 2

For radiological control, a retention area has been constructed around the refueling water storage tank which is designed to contain the volume of the entire tank in the event of a rupture. Water from equipment leakage is also routed to the liquid radwaste system via this area.

2. Reactor Make-Up Water Storage Tank Retention Area – Units 1 & 2

For radiological control, a retention area has been constructed around the reactor make-up water storage tank which is designed to contain the volume of the entire tank in the event of a rupture. Water from equipment leakage is routed to the liquid radwaste system.

3. Waste Solidification Building Sump – Units 1 & 2

All drains, cooling waters, and equipment leakages in the waste solidification building are routed to the building sump. This sump is routed to the liquid radwaste system.

4. Low Level Radwaste Storage Building Sump – Units 1 & 2

This sump is provided as a captive sump to contain any emergency release.

Steam Generator Blowdown – Units 1 & 2

The steam generators must be blown down to minimize the concentration of contaminants in the system and to regulate treatment chemical concentrations.

Water Treatment Plant System

Waste Settling Pond (DSN014)

The effluent from the water treatment plant complex sump and runoff from the water treatment plant bulk chemical storage area is discharged via the waste settling pond. The pond discharge is ultimately routed to the Southeast Yard Drainage (DSN024). Components contributing to this discharge include:

1. Water Treatment Plant Complex Sump

This sump collects all water treatment wastes, regeneration wastes, backwashes, and cooling water. The discharge from this sump is routed to the waste settling pond. The components

are identified as follows:

A. Clarifier Backwash

The clarifier uses alum, coagulant, chlorine, and a pH adjuster to convert service water to a purity level acceptable for demineralization. Backwash of the clarifier is required periodically each day to remove accumulated material. This flow is routed to the water treatment plant complex sump.

B. Water Treatment Plant Carbon Filter Backwash – Units 1 & 2

The backwash removes suspended solids which are retained on top of the carbon during the backwash operation. This discharge is routed to the water treatment plant complex sump.

C. Water Treatment Plant Sump – Units 1 & 2

All demineralizer regeneration wastes are discharged to this sump. The effluent from this sump is discharged to the neutralization tank.

D. Neutralization Tank – Units 1 & 2

This tank is used in conjunction with the water treatment plant sump to recirculate and neutralize regeneration wastes prior to discharge. Tank capacity is 20,000 gallons. The tank discharge is routed to the water treatment plant complex sump.

E. Ionics Water Treatment System

All backwash and treatment system rinse water is routed to the water treatment plant complex sump.

2. Acid and Caustic Tank Area Storm Runoff

This discharge consists of the runoff from the pad on which the acid and caustic bulk tanks are located. This discharge is routed to the waste settling pond.

Cooling Tower System – Units 1 & 2

The cooling tower system is a recirculating system which includes the condensers and cooling towers. Components of this discharge include:

1. Cooling Tower System Evaporation / Drift – Units 1 & 2

Evaporation / drift is estimated to be approximately 1.5% of the cooling tower system flow rate.

2. Cooling Tower Blowdown – Units 1 & 2 (DSN005, DSN007)

Blowdown of the cooling tower system is required to maintain the proper chemical balance in the cooling tower system. At times, the blowdown may be isolated while chemical additions for control of biofouling and corrosion protection are being made. Average flow for DSN005 and DSN007 is approximately 6.0 MGD during discharge. Currently, the cooling tower blowdown is normally continuously open.

3. Cooling Tower System Overflow – Units 1 & 2 (DSN006, DSN008)

Periodically, due to imbalances or equipment malfunction in the cooling tower system, some of the system contents will overflow the basin and flow to the yard drains. When this occurs, action is initiated to correct the problem. Average annual flows for DSN006 and DSN008 are approximately 45,000 gallons per unit, based on four (4) hours per event and three (3) events

per year.

Condenser Drain (Hot Well Flush) System – Units 1 & 2

This discharge is used periodically to control the level of contaminants in the steam cycle, especially during plant start-ups and in chemical control during system transients.

Sewage Treatment Plant System (DSN009)

The sewage treatment plant has a capacity of 100,000 GPD with 96% BOD removal. A sand filter is in place to improve plant efficiency. The effluent from the sand filter can be discharged through three (3) separate paths:

- East Yard Drainage System (normal flow path) (DSN025)
- Waste Settling Pond (alternate) (DSN014)
- Southeast Yard Drainage System (alternate) (DSN024)

Miscellaneous Systems

1. Chemical Metal Cleaning Wastes System (DSN012)

Wastewaters which result from chemical metal cleaning activities associated with plant systems will be treated and discharged in accordance with the requirements of 40 CFR Part 423. This generic point establishes monitoring requirements and effluent limits for the treatment process. The effluent from the treatment process may be discharged to various outfalls based on the location of the metal cleaning activities provided DSN012 limits are met.

2. Treated Chromate Bearing Waste Water System (DSN013)

This discharge point involves a portable ion-exchange wastewater treatment unit which is used to remove chromium from component cooling water containing potassium chromate as a corrosion inhibitor. This portable system may be moved to various parts of the plant for use and may be released via numerous sumps and drains which are routed to various discharge points. Monitoring to confirm compliance with chromium limits is conducted on each batch of wastewater treated. The average flow is approximately 500 gallons per batch.

3. Petroleum Storage Area (DSN035)

Various diked petroleum storage areas are drained as necessary to remove accumulated rainwater. Best management practices are used when draining diked areas, in accordance with the provisions of the existing NPDES permit.

Yard Drainage System

1. Southeast Yard Drainage (DSN024)

This drainage receives storm runoff from buildings and yards in the southeast areas of the plant as well as equipment cooling water and other non-routine inputs. The average flow is approximately 34,900,000 gallons per event from a drainage area of approximately 204 acres. This drainage consists of the following:

A. Southeast Yard Drain

This drain system provides a discharge path for the roof and yard drains in the southeast parts of the plant. Other inputs to the system are described below:

- a. Diesel Building Sump
The discharge from the diesel building sump is routed to the southeast yard drain.
- b. Low Voltage Switchyard Transformer Area Runoff
All plant main power transformers are surrounded by a concrete berm which will direct any transformer oil from a spill or rupture to an oil separator. Any rainwater which collects in the area passes through the oil separator prior to discharge to the yard drains. The separator is designed to retain the entire volume of the largest transformer in case of rupture.
- c. Circulating Water Pumps Sump Discharge – Unit 1
This discharge is primarily sanitary water. Cooling water supplied by the circulating water pump discharge header is used as a back-up supply.
- d. Circulating Water Canal Drainage – Unit 1
During outages maintenance may require drainage of the circulating water system. A portion of this drainage may be routed to the yard drainage system.
- e. Service Building HVAC Sump Discharge
This discharge is used to regulate the amount of suspended solids and dissolved solids in the HVAC system below the allowable levels. Supply to this system is demineralized water or potable water.
- f. Diesel Generator Fuel Oil Storage Tanks Unloading Pad Storm Runoff
The unloading pad is designed to provide containment for any diesel fuel spilled during unloading activities. Periodically, the rainwater that collects on the pad must be drained. This drainage is routed to the southeast yard drain.
- g. Turbine Building Oil Sump – Unit 1
The turbine building oil sump collects small amounts of water in addition to the oil from various equipment. The water is discharged through a portable oil-water separator to the southeast yard drain.

B. Utility Building Area Runoff

General runoff from this area is routed to the southeast yard drainage.

C. Auxiliary Boiler Diesel Fuel Oil Tank Retention Area Storm Runoff

The auxiliary boiler diesel fuel oil tank is surrounded by a containment structure which is designed to retain the entire contents of the tank in case of rupture. Periodically, rainwater which collects inside the containment structure must be drained. This drainage is routed to the southeast yard drainage.

D. Waste Settling Pond

Discharge from the waste settling pond is routed to the southeast yard drainage.

2. East Yard Drainage (DSN025)

This drainage receives storm runoff from buildings and yards in the east plant areas as well as equipment cooling water and other non-routine inputs. The average flow is approximately 684,200

gallons per event from a drainage area of approximately 4 acres.

The east yard drain is the collection point for all the various plant water inputs to the east yard drainage. The inputs are described below:

- A. Tendon Access Gallery Sump Discharge – Units 1 & 2
This discharge consists primarily of ground water which seeps into the annulus around the containment buildings.
- B. Fire Pump Cooling Water
The supply for this cooling water is the fire pump discharge header. The discharge is routed to the east yard drain.
- C. Central Alarm Station HVAC Cooling Water
The sanitary water system provides the cooling water to the Central Alarm Station HVAC system. The discharge is routed to the east yard drain.
- D. Cooling Tower System Overflow – Unit 1 (DSN006)
Periodically, due to imbalances or equipment malfunctions in the cooling tower system, some of the system contents will overflow the basins and will flow to the east yard drain. When this occurs, immediate action is initiated to correct the problem. The contents of the system are periodically pumped out for maintenance. This volume of water is discharged to the east yard drain.
- E. Electrical Cable Tunnel Sump Discharge
There is a concrete underground tunnel which connects the diesel generator building with the Unit 1 Auxiliary building. This tunnel provides a path for emergency power to be supplied to the plant. The sump collects and discharges any ground water which may collect in the tunnel to the east yard drain.
- F. Turbine Building Air Compressor Cooling Water – Units 1 & 2
The service water system provides cooling water to the Turbine building air compressors. This discharge is routed to the east yard drain.
- G. Circulating Water Canal Drainage – Unit 1
During outages maintenance may require drainage of the circulating water system. A portion of this drainage may be routed to the yard drainage system.

3. Northcentral Yard Drainage (DSN027)

The northcentral yard drainage collects storm runoff from buildings and yards in the northcentral area of the plant as well as plant water inputs on a routine basis. The northcentral yard drain consists of three (3) pipes which merge into one common discharge prior to contact with Wilson Creek. The average flow is approximately 855,300 gallons per event from a drainage area of approximately five (5) acres. The components of this system are described below:

- A. Circulating Water Pump Sump Discharge – Unit 2
This discharge is primarily cooling water supplied by the circulating water pump discharge header. Sanitary water is supplied as a backup.
- B. Turbine Building Oil Sump – Unit 2
The turbine building oil sump collects small amounts of water in addition to the oil from various equipment. The water is discharged through a portable oil-water separator to the northcentral yard drain.

C. Cooling Tower System Overflow – Unit 2 (DSN008)

Periodically, due to imbalances or equipment malfunctions in the cooling tower system, some of the system contents will overflow the basins and will flow to the northcentral yard drain. When this occurs, immediate action is initiated to correct the problem. The contents of the system are periodically pumped out for maintenance. This volume of water is discharged to the northcentral yard drain.

D. Circulating Water Canal Drainage – Unit 2

During outages maintenance may require drainage of the circulating water system. A portion of this drainage may be routed to the yard drainage system.

4. Northwest Yard Drainage (DSN026)

The northwest yard drainage collects runoff from a small part of the northwest area of the plant and receives the discharge from the construction air compressor structure. The average flow is approximately 684,200 gallons per event from an approximate drainage area of four (4) acres. The discharges from the air compressor structure are described below:

A. Construction Air Compressor Cooling Water

The potable water system provides secondary cooling for the compressed air system. The discharge is routed through an oil-water separator to the northwest yard drain.

B. Construction Air Compressor Structure Drains

The floor drains from the air compressor structure are routed through an oil-water separator to the northwest yard drain.

C. High Voltage Switchyard Drainage

This discharge consists of stormwater drainage from the west side of the high voltage switchyard to the northwest yard drain.

5. West Yard Drainage (DSN028)

The west yard drain collects runoff from the west portion of the plant and the construction garage and routes it to Wilson Creek. The average flow is approximately 2,600,000 gallons per event from a drainage area of approximately fifteen (15) acres.

A. Construction Garage Wash Area Oil-Water Separator

Discharge from the construction garage wash area is discharged to an oil-water separator. The effluent from the oil-water separator discharges to the west yard drain which ultimately discharges to Wilson Creek.

6. Southwest Yard Drainage (DSN029)

The southwest yard drainage system provides a discharge path for drainage from the southwest area of the plant, the main parking lot, and the Fire Training Center. The average flow is approximately 500,000 gallons per event from an approximate area of two (2) acres.

A. Fire Training Area Fuel Oil Storage Area Oil-Water Separator

The oil-water separator removes any oil which may be combined with rainwater inside the oil storage area berm prior to discharge. The discharge from this oil-water separator is routed to the southwest yard drainage.

B. Fire Training Area Stormwater Runoff

The majority of the stormwater runoff from this area is routed to a oil-water separator before discharging to the southwest yard drainage.

- C. Main Parking Lot Runoff
Stormwater runoff from the main parking lot is routed to the southwest yard drainage.
- D. Service Water Structure Sump Discharge – Units 1 & 2
All cooling waters and leakage flows are routed to the building sump and are subsequently discharged to the southwest yard drainage.

7. Water Tank Drainage System

There are several tank systems that store water for various plant uses. On occasion, these tanks require drainage for testing or maintenance operations. The tanks in this system are described below:

- A. Clarified / Well Water Storage Tank Drainage
Drainage from this tank would be routed to the southeast yard drain.
- B. Demineralizer Water Storage Tank Drainage
Drainage from these tanks would be routed to the southeast yard drain.
- C. Condensate Storage Tank Drainage – Units 1 & 2
Drainage from these tanks would be routed to the east yard drain.
- D. Sanitary Water Tank Drainage (Production & Construction)
Drainage from these tanks would be routed to the east yard drain (Production) and the northwest yard drain (Construction).
- E. Fire Protection Tank Drainage
Drainage from these tanks would be routed to the east yard drain.

8. Well Water System

On-site wells provide groundwater for the sanitary water system, for the fire protection system, and as back-up to the demineralizers. Occasionally, if a well has not been used for a period of time, it must be flushed to produce water of acceptable quality for plant use.

9. Miscellaneous Valve Boxes and Electrical Cable Pullboxes – Units 1 & 2

Miscellaneous valve boxes and electrical cable pullboxes which collect and discharge any rainwater or valve leakoff to the yard drain system are located in various areas of the plant.

Attachment 5 to U.S. EPA Form 3510-2C

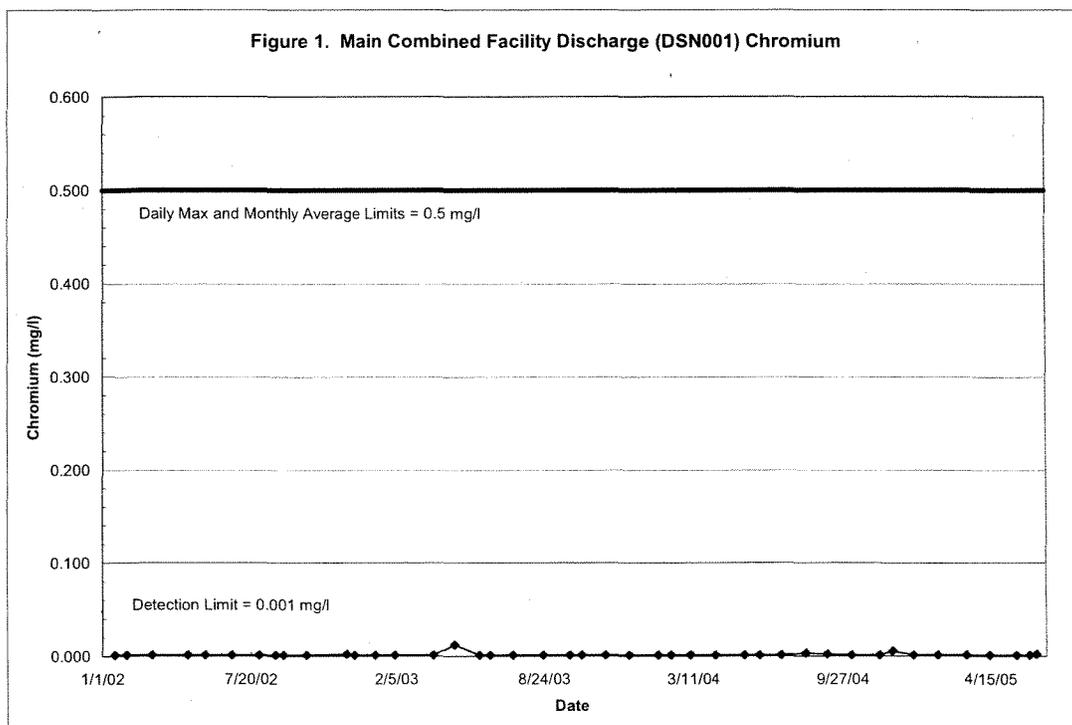
Proposed Permit Revisions

**Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619**

**Description of Proposed Permit Revisions
Farley Nuclear Plant**

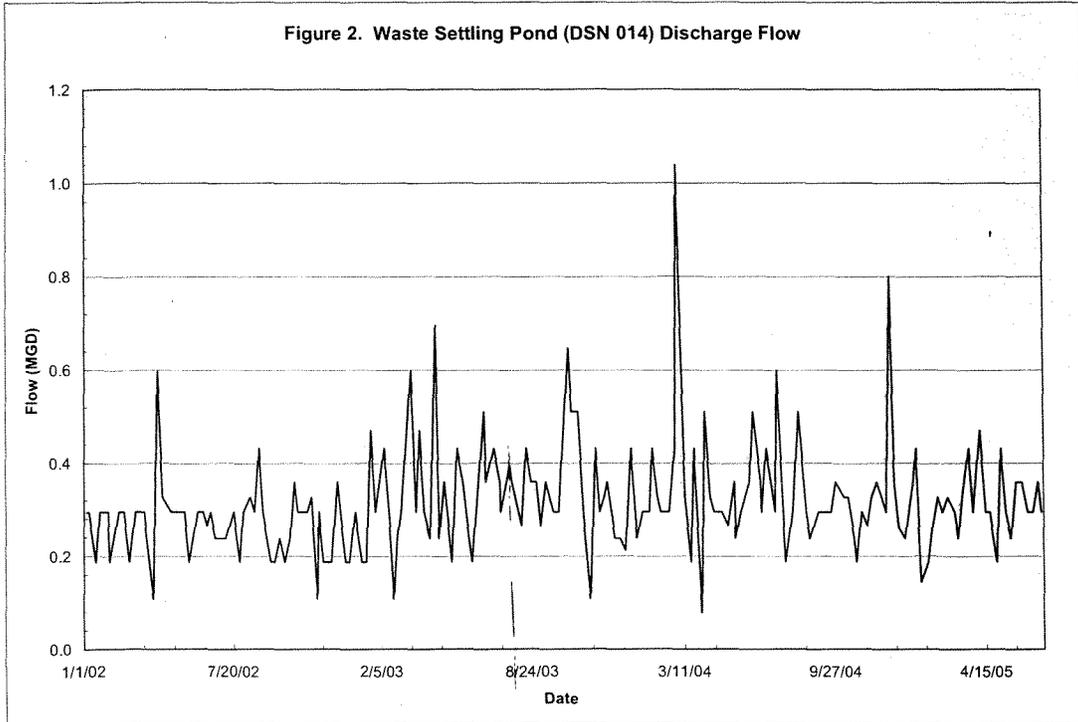
Part I(A): Outfall 001

It is requested that the monitoring frequency for chromium on Outfall 001 (Main Combined Facility Discharge) be changed to once per quarter. Past data (Figure 1) indicates that chromium values for this discharge is consistently meeting permit limitations and more frequent monitoring is not warranted.



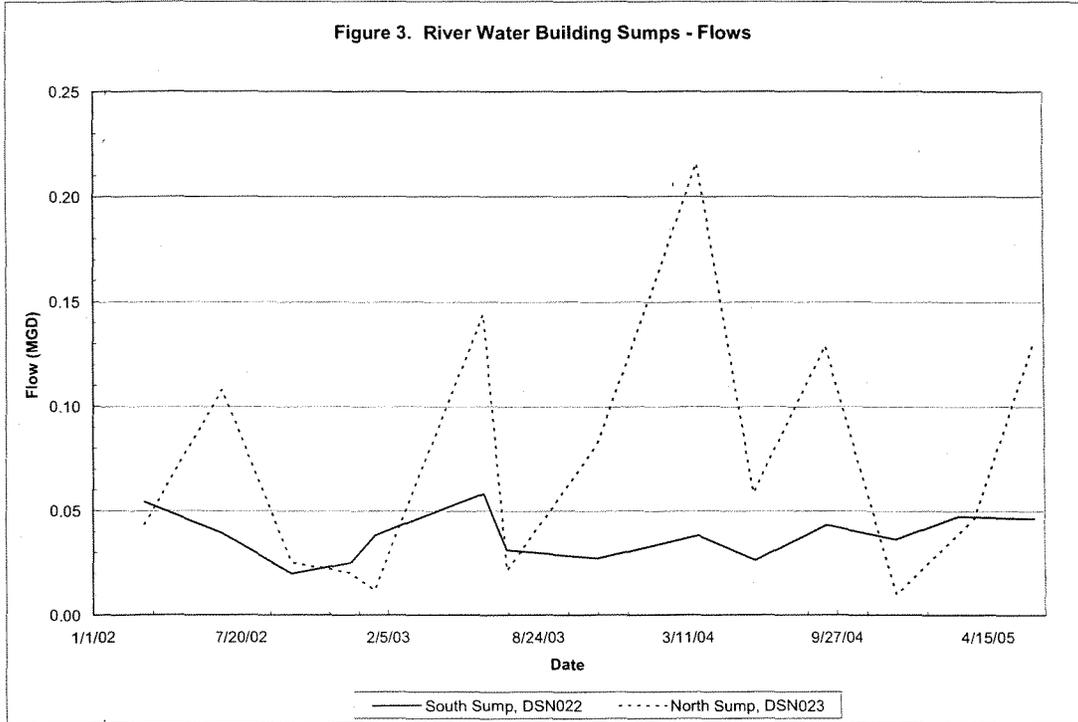
Part I(A): Outfall 014

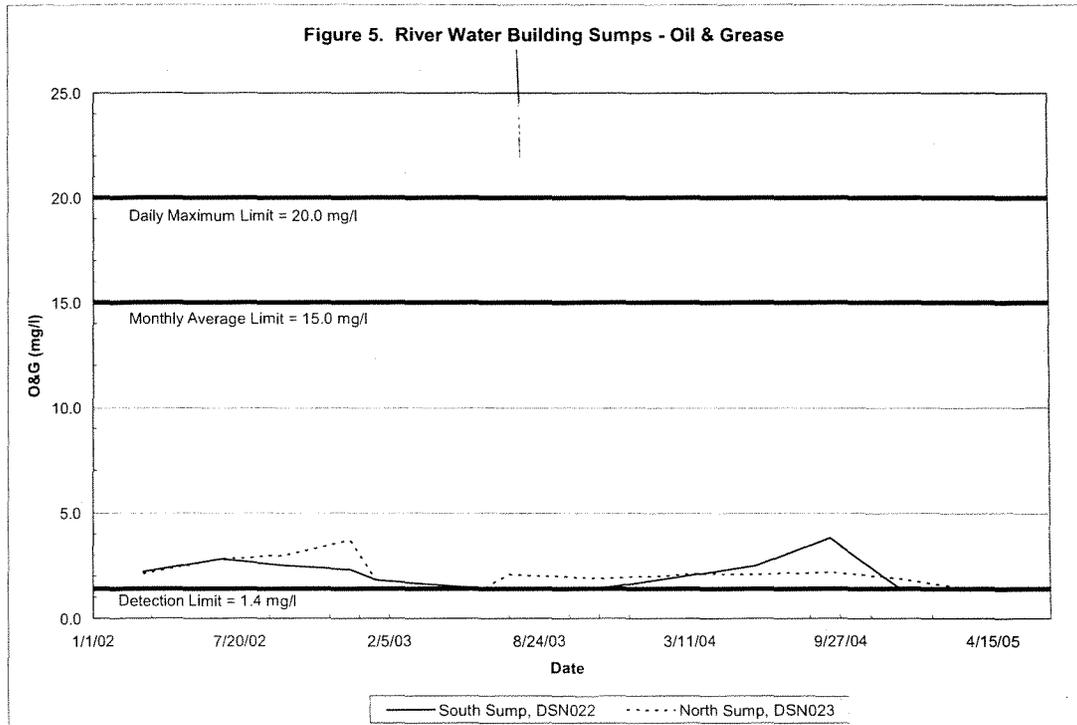
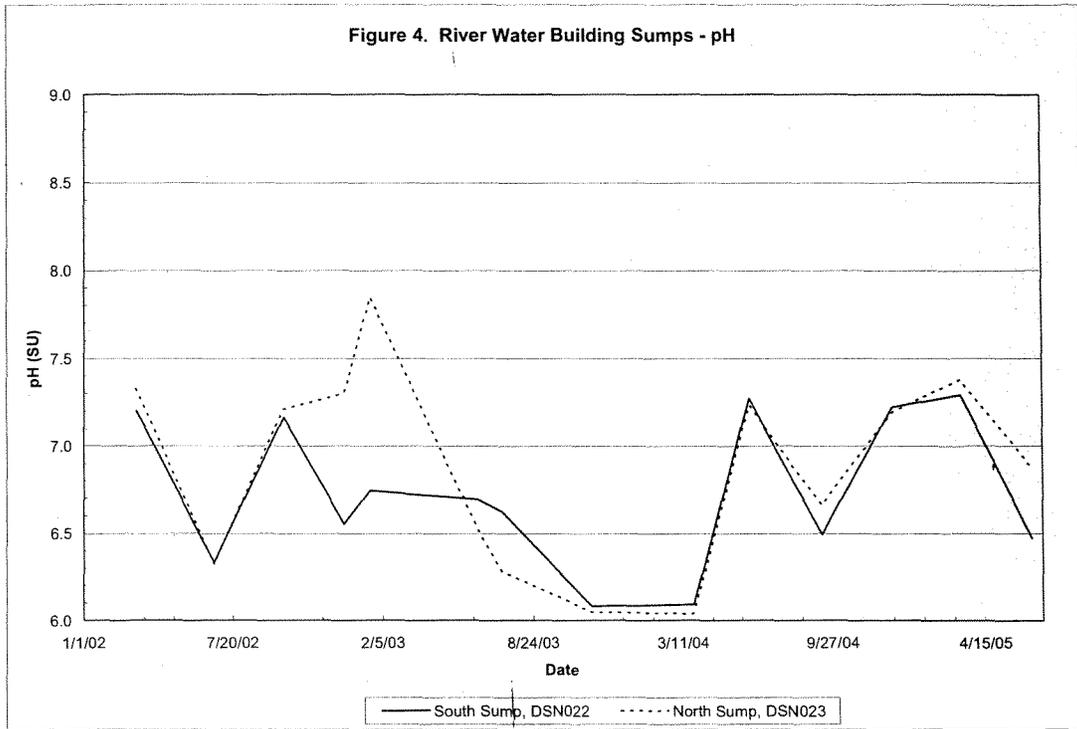
It is requested that the monitoring frequency for flow on Outfall 014 (Waste Settling Pond) be changed to once per month. All other parameters for this outfall have once per month sampling frequencies, so this would serve to standardize the sampling requirements for this outfall. Additionally, past data (Figure 2) demonstrates that the discharge flow generally remains less than 1.0 MGD.



Part I(A): Outfalls 022 and 023

It is requested that the monitoring frequency for all parameters for Outfalls 022 and 023 (River Water Building Sump South and North, respectively) be changed to once per six months. Past data (Figures 3, 4, and 5) indicates that these discharges are consistently meeting permit and/or regulatory limitations and more frequent monitoring is not warranted.





Part I(A): Outfalls 001, 005, 006, 007, 008

Refer to EPA Form 3510-2C Attachment 6 for a complete description of the cooling tower dechlorination arrangement and proposed monitoring program.

Attachment 6 to U.S. EPA Form 3510-2C

Description of Dechlorination Program

**Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619**

Description of Dechlorination Program Farley Nuclear Plant

Since the NPDES permit renewal in 2000, Farley Nuclear Plant (FNP) has altered the manner in which the circulating water chemical treatment system is operated in order to support the addition of dechlorination equipment. Two meetings were held with ADEM personnel regarding the change before it was implemented on a trial basis in February 2005, and ADEM concurred that institution of this program would be beneficial in dechlorinating cooling tower discharges.

Previously, the cooling tower chlorination practice at FNP was composed of the following steps:

1. Close cooling tower blowdown,
2. Add sodium hypochlorite (bleach) to achieve residual chlorine in the system,
3. Maintain chlorine residual for several hours with blowdown closed,
4. Stop sodium hypochlorite addition,
5. Wait for chlorine to dissipate naturally or add ammonium bisulfite to dechlorinate system,
6. Verify non-detectable levels of chlorine (TRC and FAC),
7. Open cooling tower blowdown.

This practice was not an efficient treatment strategy, and did not adequately protect cooling tower components from biofouling. Biofouling degrades system performance, and can even result in physical failure of cooling tower structural components if not properly controlled.

The current chlorination/dechlorination strategy is as follows (refer to Figure 1):

- The circulating water system is continuously treated with sodium hypochlorite to maintain a system chlorine residual of approximately 0.50 mg/l Free Available Chlorine (FAC).
- Cooling tower blowdown normally remains open with a continuous discharge.
- A dechlorination chemical (normally ammonium bisulfite, but sodium bisulfite may also be utilized) is injected at the Service Water Surge Tank, which is a point downstream of where cooling tower blowdown commingles with Service Water flow. There is not an available dechlorination point prior to mixing due to system configuration.
- The ammonium bisulfite feedrate is based on actual chlorine levels in the circulating water system, plus some excess feed to act as a buffer against any fluctuations in chlorine levels. This ensures that the mass of chlorine discharged from the circulating water system is effectively dechlorinated prior to final discharge.
- The only available downstream monitoring point is the Main Combined Facility Discharge (DSN001). Compliance with the water quality based TRC limit of 0.20 mg/l at this outfall has been maintained. The residual chlorine present at this outfall is due to chemical treatment of the once-through Service Water system.

Southern Nuclear Operating Company proposes the following permit changes to reflect the current Circulating Water chlorination/dechlorination program:

Outfalls DSN005 and DSN007:

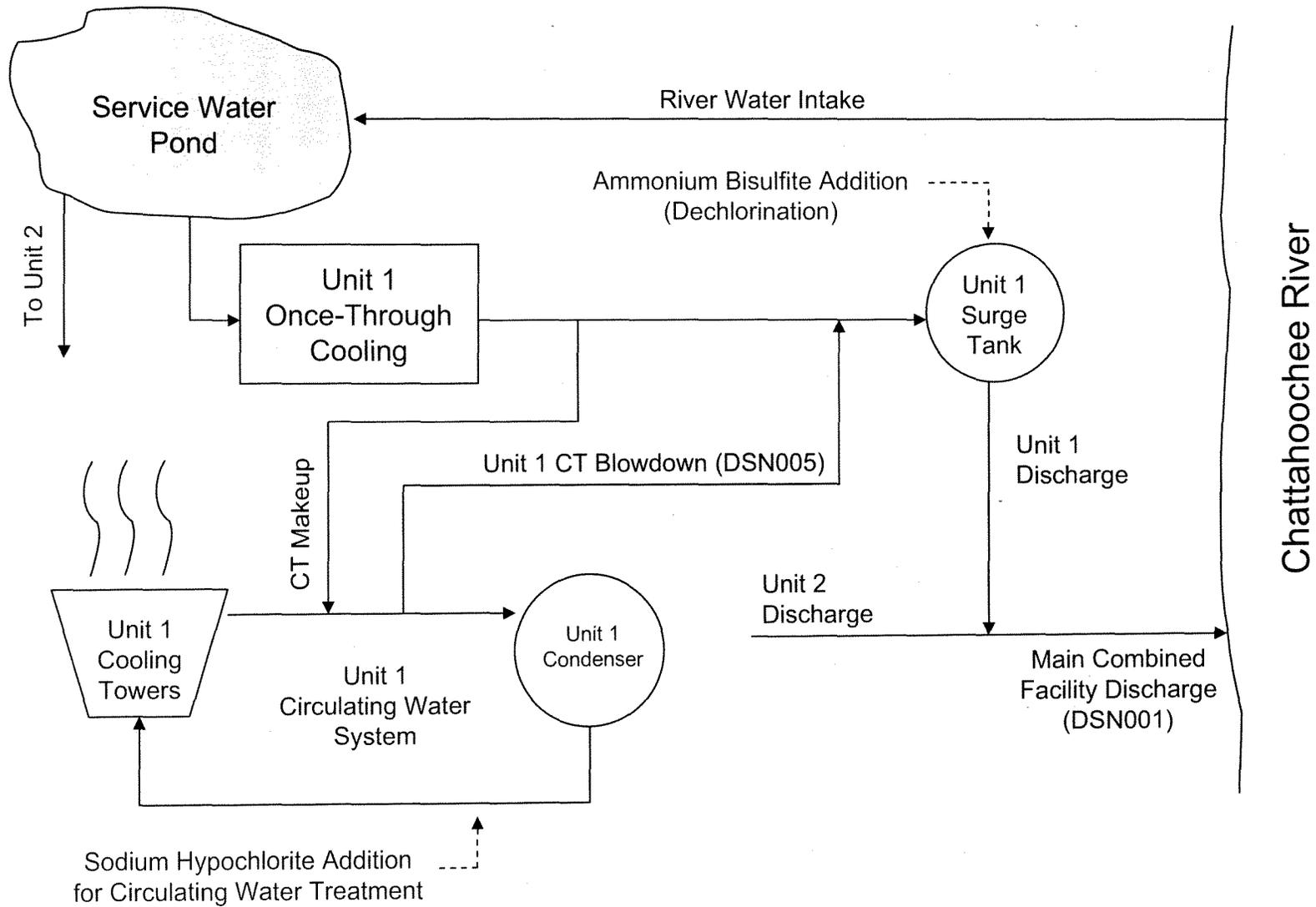
Add a footnote indicating that the TRC, FAC, and Time of TRC limitations do not apply when the dechlorination system is in service. If dechlorination is out of service then the existing limitations would apply. Upon request of the Director, sampling and mass-balance calculations can be performed to demonstrate that the mass of chlorine discharged via cooling tower blowdown is neutralized by the dechlorination system prior to final discharge.

Outfall DSN001:

Change footnote 3 to the following (changes in italics): "When chlorination is occurring for purposes of corbicula or microbiofouling control, in accordance with BMP Plan, grab samples shall be taken to verify compliance with total residual chlorine limitations. *Samples shall also be taken when the*

Circulating Water system is chlorinated and dechlorination is in service. Sampling is required only during these periods. If bromine or a combination of bromine and chlorine is utilized for control of biofouling, monitoring requirements for TRC and FAC shall be applicable to TRO (Total Residual Oxidants) and FAO (Free Available Oxidants). There is no difference in test methods between TRC/FAC and TRO/FAO."

Figure 1. Dechlorination Simplified Flow Diagram



**U.S. EPA Form 3510-2F
Application for Permit to Discharge Storm Water
Discharges Associated with Industrial Activity**

**Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619**

Form **2F**
NPDES



United States Environmental Protection Agency
Washington, DC 20460

Application for Permit to Discharge Storm Water Discharges Associated with Industrial Activity

Paperwork Reduction Act Notice

Public reporting burden for this application is estimated to average 28.6 hours per application, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate, any other aspect of this collection of information or suggestions for improving this form, including suggestions which may increase or reduce this burden to: Chief, Information Policy Branch, PM-223, U.S. Environmental Protection Agency, 401 M St., SW, Washington, DC 20460, or Director, Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

I. Outfall Location

For each outfall, list the latitude and longitude of its location to the nearest 15 seconds and the name of the receiving water.

A. Outfall Number <i>(list)</i>	B. Latitude	C. Longitude	D. Receiving Water <i>(name)</i>
SEE ATTACHED			

II. Improvements

A. Are you now required by any Federal, State, or local authority to meet any implementation schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls		3. Brief Description of Project	4. Final Compliance Date	
	number	source of discharge		a. req.	b. proj.
N/A					

B. You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. Site Drainage Map

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each known past or present areas used for outdoor storage or disposal of significant materials, each existing structure control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage or disposal units (including each are not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility.

Continued from the Front

IV. Narrative Description of Pollutant Sources

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
	SEE ATTACHED				

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

SEE ATTACHED

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table 2F-1
N/A		

V. Non Stormwater Discharges

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of nonstormwater discharges, and that all nonstormwater discharges from these outfall(s) are identified in either an accompanying Form 2C or Form 2E application for the outfall.

Name of Official Title (type or print)	Signature	Date Signed
L. M. Stinson, Vice President, Farley Project		8/23/05

B. provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

SEE ATTACHED

VI. Significant Leaks or Spills

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

THERE HAVE BEEN NO SIGNIFICANT LEAKS OR SPILLS OF TOXIC OR HAZARDOUS MATERIALS AT FARLEY NUCLEAR PLANT IN THE LAST THREE (3) YEARS.

VII. Discharge Information

A,B,C, & D: See instruction before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Tables VII-A, VII-B, and VII-C are included on separate sheets numbered VII-1 and VII-2.

E. Potential discharges not covered by analysis - is any toxic pollutant listed in table 2F-2, 2F-3, or 2F-4, a substance or a component of a substance which you currently use or manufacture as an intermediate or final product or byproduct?

Yes (list all such pollutants below)

No (go to Section IX)

N/A

VIII. Biological Toxicity Testing Data

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

Yes (list all such pollutants below)

No (go to Section IX)

ANNUAL BIOMONITORING AS REQUIRED BY EXISTING NPDES PERMIT ON THE MAIN COMBINED FACILITY DISCHARGE (DSN001).

IX. Contact analysis Information

Were any of the analysis reported in item VII performed by a contact laboratory or consulting firm?

Yes (list the name, address, and telephone number of, and pollutants analyzed by, each such laboratory or firm below)

No (go to Section X)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
Alabama Power Company General Test Laboratory	Building No. 8 P.O. Box 2641 Birmingham, AL 35291	(205) 664-6194	All except pH and temperature

X. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

A. Name & Official Title (type or print)

L. M. Stinson, Vice President, Farley Project

B. Area Code and Phone No.

(205) 992-5000

C. Signature

L.M. Stinson

D. Date Signed

8/23/05

Attachment 1 to U.S. EPA Form 3510-2F

Section I. Outfall Locations

**Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619**

**Form 2F, Section I – Outfall Locations
Farley Nuclear Plant**

The following outfalls located on the FNP site convey stormwater runoff from areas associated with industrial activity to the Chattahoochee River. None of the areas discharge directly to the river but discharge directly or indirectly to small tributaries, including Wilson Creek, which ultimately discharge to the Chattahoochee River. The stormwater drainages and their corresponding Discharge Serial Number (DSN) are provided below. DSN024, DSN025, and DSN029 discharge indirectly to the Chattahoochee River (31° 12' 52" Latitude, 85° 05' 55" Longitude) via unnamed tributaries on the site. DSN026, DSN027, and DSN028 discharge to Wilson Creek (31° 13' 45" Latitude, 85° 06' 45" Longitude).

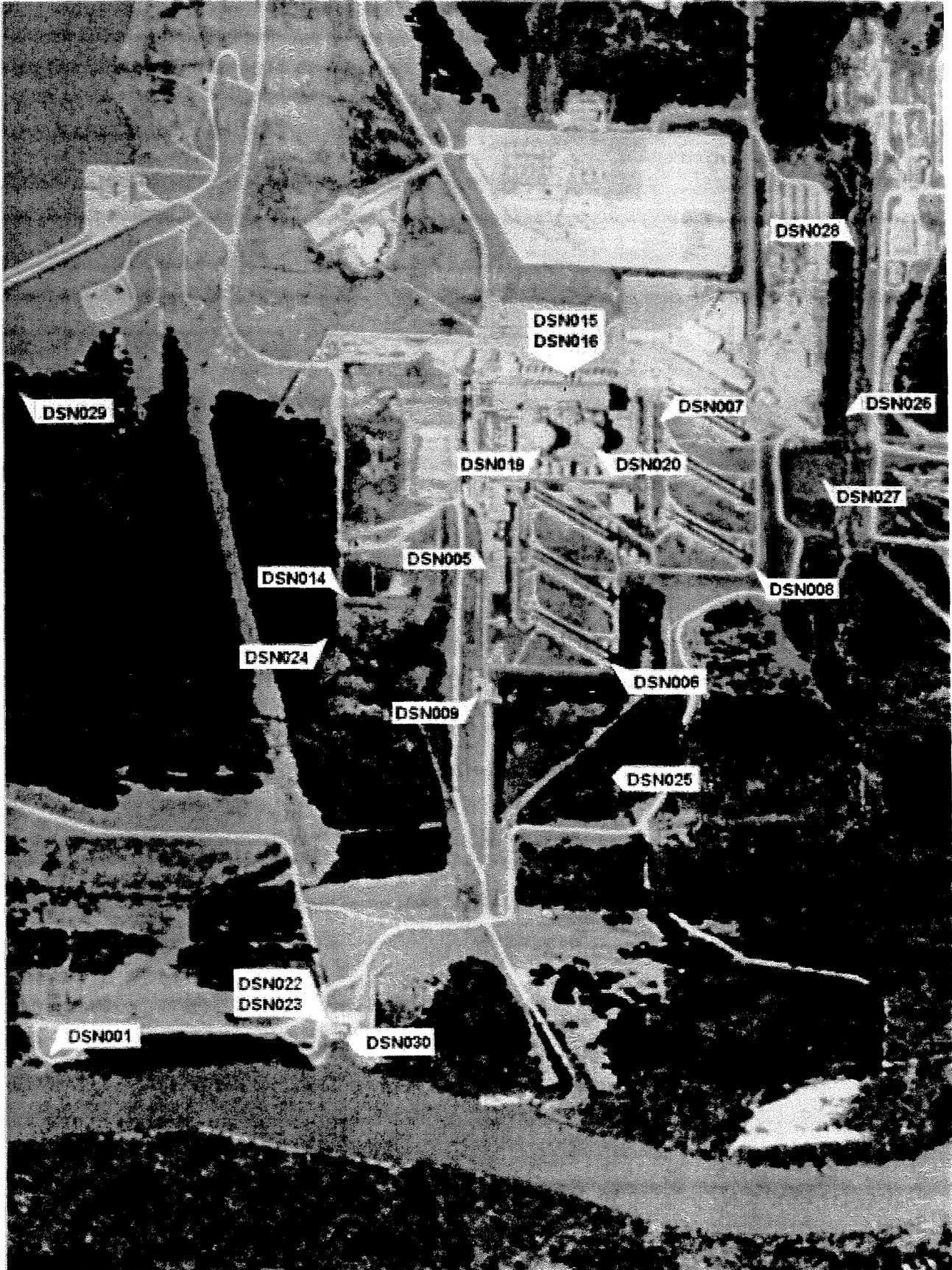
Description	Discharge Serial Number (DSN)
Southeast Yard Drainage	DSN024
East Yard Drainage	DSN025
Northwest Yard Drainage	DSN026
Northcentral Yard Drainage	DSN027
West Yard Drainage	DSN028
Southwest Yard Drainage	DSN029

Attachment 2 to U.S. EPA Form 3510-2F

Section III. Site Drainage Map

**Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619**

Farley Nuclear Plant - NPDES Permit AL0024619



NOTE: DSN012 and DSN013 are permitted as treatment processes and do not have specific outfall locations.

Attachment 3 to U.S. EPA Form 3510-2F
Section IVA. Description of Stormwater Outfalls

Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619

**Form 2F, Section IV(A) – Stormwater Outfall Description
Farley Nuclear Plant**

The following outfalls are utilized to convey stormwater associated with industrial activity at FNP from the referenced drainage areas to the Chattahoochee River. The drainage areas are briefly described in the following table.

Outfall	Description
DSN024 Southeast Yard Drainage	The Southeast Yard Drainage receives stormwater runoff from buildings and yards in the southeast areas of the plant. The average flow is approximately 34,900,000 gallons per event from a drainage area of approximately 204 acres.
DSN025 East Yard Drainage	This drainage receives stormwater runoff from buildings and yards in the east plant areas. The average flow is approximately 684,200 gallons per event from a drainage area of approximately 4 acres.
DSN026 Northwest Yard Drainage	This drainage receives runoff from the northwest area of the plant. The average flow is approximately 684,200 gallons per event from an approximate drainage area of 4 acres.
DSN027 Northcentral Yard Drainage	This drainage receives stormwater runoff from buildings and yards in the northcentral area of the plant. The flow is approximately 855,300 gallons per event from a drainage area of approximately 5 acres.
DSN028 West Yard Drainage	This drainage receives stormwater runoff from primarily yard areas in the west portion of the site. The average flow is approximately 2,600,000 gallons per event from a drainage area of approximately 15 acres.
DSN029 Southwest Yard Drainage	This drainage receives stormwater from the southwest portion of the plant including the main parking lot and Fire Training Center. The average flow is approximately 500,000 gallons per event from a drainage area of approximately 2 acres.

Attachment 4 to U.S. EPA Form 3510-2F
Section IVB. Materials Management Practices

Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619

**Form 2F, Section IV(B) – Materials Management Practices
Farley Nuclear Plant**

There have been no significant quantities of hazardous materials at FNP over the past three (3) years which have been treated, stored, or disposed in a manner which would result in exposure to stormwater and / or contamination of stormwater runoff. The following FNP procedures address management of hazardous materials and hazardous wastes and provide guidance relative to prevention of contamination resulting from contact with stormwater.

FNP-0-AP-60	Oil Spill Prevention, Control, and Countermeasure Plan, Hazardous Waste Contingency Plan
FNP-0-CCP-900	Hazardous Waste Holding Area Requirements
FNP-0-CCP-901	Shipping of Hazardous Wastes
FNP-0-CCP-904	Receipt and Identification of Industrial Wastes
FNP-0-CCP-905	Chemistry Support to FNP-0-SHP-26
FNP-0-SHP-26	Chemical Product Control and Hazard Communication Program
FNP-0-SHP-30	Waste Disposal
FNP-0-ENV-25	Operation of the Farley Nuclear Plant Landfill
FNP-0-TCP-23	Hazardous Waste Training Plan

In addition to the above procedures, proactive materials management practices are employed to minimize contact of hazardous materials with stormwater including indoor storage, structural control measures, secondary containment for tanks and container storage, and materials management training. A formal Hazard Communication Program (FNP-0-SHP-26) has also been implemented.

Attachment 5 to U.S. EPA Form 3510-2F
Section IVC. Structural Control Measures

Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619

**Form 2F, Section IV(C) – Description of Structural Controls
Farley Nuclear Plant**

Structural control methods utilized at FNP to control contact of stormwater with pollutants include:

Containments

Concrete containments are utilized around tanks and drum storage areas contain hazardous materials. Drainage from containment areas is strictly controlled by procedure to ensure accumulated rainwater is not contaminated with the stored material prior to release.

Site Drainage System

A system of pipes, concrete culverts, and spillways is utilized to collect and channel stormwater flow in areas where high flows pose significant potential for erosion.

Use of Grass Swales, Vegetation / Revegetation of Eroded Areas

Natural grass swales are utilized when appropriate for drainage of sheet flow runoff from large areas of the site. This promotes infiltration and minimizes erosion by slowing runoff velocity. Eroded or newly disturbed areas are promptly vegetated to prevent soil contamination of runoff; alternatively, rip-rap may be used to slow runoff velocity and minimize erosion.

Attachment 6 to U.S. EPA Form 3510-2F
Section VB. Description of Sample Point

Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619

**Form 2F, Section V(B) – Description of Sample Location
Farley Nuclear Plant**

The stormwater sample was obtained from a drain near the bulk hydrogen storage area during a 0.51 inch rainfall event which occurred on May 19, 2005. This point is located in the power block and is representative of the quality of stormwater runoff associated with industrial activity at Farley Nuclear Plant. Both manual grab and composite samples were collected in accordance with EPA methodology during the rainfall event. Field data and analytical data are presented in a separate attachment.

The stormwater drainage system at Farley Nuclear Plant is evaluated for non-stormwater discharges by:

1. Review of drainage drawings,
2. Plant walkdowns, and
3. Interviews of maintenance, engineering, and operations personnel.

Attachment 7 to U.S. EPA Form 3510-2F
Section VIIA & B. Chemical Analysis Reports

Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPGRAB
Sample Date : 19-May-05
Customer ID : AL-0024619
Delivery Date : 20-May-05

Description: FNP - Stormwater Grab
Repermitting

Laboratory ID Number: AJ13562

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
<i>General Characteristics</i>							
Field pH	DJM	5/19/2005	EPA 150.1		0.00	6.59	SU
Biochemical Oxygen Demand, 5 Day	HRG	5/25/2005	SM 5210B		2.	14.	mg/l
Chemical Oxygen Demand	RDA	5/24/2005	EPA 410.4		1.	37	mg/l
Solids - Suspended	HRG	5/23/2005	EPA 160.2		1.	98.	mg/l
Nitrogen, Nitrate/Nitrite	EMH	5/20/2005	353.2/CALC		0.01	0.580	mg/l as N
Oil and Grease	RDA	5/25/2005	EPA 1664		1.4	Not Detected	mg/l
Phosphorus, Total	HRG	5/31/2005	EPA 365.2		0.01	0.48	mg/l as P
Nitrogen, Nitrate	EMH	5/20/2005	EPA 353.2		0.01	0.57	mg/l as N
Nitrogen, Nitrite	EMH	5/20/2005	EPA 353.2		0.01	0.01	mg/l as N
Nitrogen, Total Kjeldahl	EMH	6/2/2005	EPA 351.2		0.01	1.54	mg/l as N
Nitrogen, Total	EMH	6/2/2005	SM4500		0.01	2.12	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments:

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____

Date: 10-Jun-05

General Test Laboratory
P.O. Box 2641
Birmingham, Alabama 35291
(205) 664 - 6081

CERTIFICATE OF ANALYSIS

To: Mr. Ken Darby (and email)
Farley Nuclear Plant

Customer Account : NFNPCOMP
Sample Date : 19-May-05
Customer ID : AL-0024619
Delivery Date : 20-May-05

Description: FNP - Stormwater Composite
Repermitting

Laboratory ID Number: AJ13563

Name	Analyst	Test Date	Reference	Vio Spec	MDL	Results	Units
General Characteristics							
Biochemical Oxygen Demand, 5 Day	HRG	5/25/2005	SM 5210B		2.	16.	mg/l
Chemical Oxygen Demand	RDA	5/24/2005	EPA 410.4		1.	36	mg/l
Solids - Suspended	HRG	5/23/2005	EPA 160.2		1.	138.	mg/l
Nitrogen, Nitrate/Nitrite	EMH	5/20/2005	353.2/CALC		0.01	0.620	mg/l as N
Phosphorus, Total	HRG	5/31/2005	EPA 365.2		0.01	0.35	mg/l as P
Nitrogen, Nitrate	EMH	5/20/2005	EPA 353.2		0.01	0.61	mg/l as N
Nitrogen, Nitrite	EMH	5/20/2005	EPA 353.2		0.01	0.01	mg/l as N
Nitrogen, Total Kjeldahl	EMH	6/2/2005	EPA 351.2		0.01	1.72	mg/l as N
Nitrogen, Total	EMH	6/2/2005	SM4500		0.01	2.34	mg/l

This Certificate is for the physical and/or chemical characteristics of the sample as

Comments:

cc: Mr. Greg Elmore
Southern Nuclear

Quality Control _____ Supervision _____

Date: 10-Jun-05

Attachment 8 to U.S. EPA Form 3510-2F

Section VIID. Sampling/Flow Measurement Methodology

**Joseph M. Farley Nuclear Power Plant
NPDES No. AL0024619**

**Form 2F, Section VII(D) – Description of Sampling/Flow Measurement Methodology
Farley Nuclear Plant**

The collection of the sample for the reported analyses was performed using appropriate sample containers, sample preservation and holding times. For the parameters of pH and oil and grease, grab samples were taken during the first thirty (30) minutes of the discharge as required. For all other parameters, both a grab sample collected during the first thirty (30) minutes of the discharge and a flow-weighted composite sample were taken for analysis. All samples were collected from the discharge resulting from a storm event greater than 0.1 inches (0.51 inches total rainfall).

Flow rate was determined by estimating the velocity of the storm water in the discharge and measuring the wetted cross-sectional area. Based on repeated measurements conducted over the duration of the sampling event, the maximum observed flow rate was 239 gallons per minute.