

TENNESSEE VALLEY AUTHORITY

NORRIS, TENNESSEE 37828

JUN 5 1981



Mr. Howard D. Zeller, Acting Director
Enforcement Division
U.S. Environmental Protection Agency
Region IV
345 Courtland Street, NE.
Atlanta, Georgia 30308

Dear Mr. Zeller:

BROWNS FERRY NUCLEAR PLANT NPDES PERMIT NO. AL0022080 - SUPPLEMENTAL
DATA FOR PERMIT RENEWAL

In accordance with a discussion with Charles Kaplan of your staff, we have enclosed two complete sets of EPA Form 3510-1 and 3510-2C, Section V. Please note that priority pollutant data were not collected on SDN 003, Residual Heat Removal (RHR) service water, since it was not chlorinated at the time of field collection. We will provide you with the priority pollutant data for this outfall by September 1981. A revised flow diagram indicating the flow paths for all discharges including the modifications listed below in items 1, 2, and 3 of this letter will be provided to you as soon as possible. We understand that this information will enable your staff to reissue the subject permit for a full five-year term at the same time the subject permit is reissued confirming the Section 316(a) and (b) Finding of Fact.

We are proceeding with procurement and installation of equipment for the proposed new computer model system for determining compliance with temperature limitations. We anticipate having the monitoring system installed and ready to begin the accuracy demonstration that you requested by July 1982.

For purposes of thermal compliance monitoring, TVA will continue to utilize the existing monitoring system. When the new computer model system has been installed and approved for compliance, we will use the new system and new monitors. Our field studies indicate that the diffuser mixing zone extends to approximately one diffuser length (1,800 feet) downstream of the diffuser discharge. The new monitors will be located at the edge of the mixing zone.

In addition to the enclosed information, we request that the following modifications be incorporated into the new five-year permit.

1. We propose to reroute the RHR SDN 003 service water to the Condenser Circulating Water (CCW) discharge conduit (SDN 011). This action will eliminate the point source discharge for the RHR service water effluent (SDN 003).

THIS DOCUMENT CONTAINS
POOR QUALITY PAGES

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JUN 5 1981

Mr. Howard D. Zeller

It is estimated the a maximum flow of 9,000 gal/min will occur for one of the three units during a release. The monitoring requirements for the CCW should be adequate for the combined streams and we request that the permit allow elimination of effluent limitations and monitoring requirements for the RHR system (SDN 003) when the rerouting is completed.

The present schedule for implementing this design change on a unit basis is:

Unit 1 - September 25, 1981
Unit 2 - March 26, 1982
Unit 3 - March 4, 1983

2. A permit modification is requested to allow for the rerouting of the office building drains (SDN 013) to the diesel generator building sumps (SDN 015) and elimination of the point source discharge monitoring requirements for the office building drains when the rerouting is completed. This will enable the plant to install a total flowmeter to monitor flow from control bay floor drains, sinks, and eyewashers to units 1 and 2 diesel generator building sumps.

This design change is being reviewed and a work schedule has not been assigned. We will advise you when a specific work schedule has been determined.

3. We request that the permit be modified to reroute the hypochlorination building drains (SDN 017) by way of the chemical waste pond to the sedimentation pond and then to the Tennessee River. The average flow from the hypochlorination building drains is estimated to be 0.057 million gallons per day.

The work on the building drains is partially complete and should be finished in September 1981.

4. We request a revision in the language for serial discharge number 005, sedimentation pond. The present permit requires that the effluent pH shall be monitored at the point of discharge prior to mixing with other waste streams. We request that the location for pH monitoring be moved to a point in the biothermal research project drainage ditch 25 feet downstream of the sedimentation pond discharge. This will provide better access for sampling and give a more representative sample.

Mr. Howard D. Zeller

JUN 5 1981

We request that this information be included in the final permit prepared by your staff. It may be advantageous to set up a meeting between our staffs and the Alabama Water Improvement Commission to attain mutually acceptable permit conditions. If such a meeting is desired or if you have any questions, please contact W. G. Carpenter of my staff at (615) 632-6450 or FTS 856-6450 in Norris, Tennessee.

Sincerely,

Original Signed By

Paul Schmierbach

Mohamed T. El-Ashry, Ph.D.
Assistant Manager of Natural
Resources (Environment)

Enclosure (2)

cc (Enclosure):

Mr. Charles Kaplan
Enforcement Division
U.S. Environmental Protection Agency
Region IV
345 Courtland Street, NE.
Atlanta, Georgia 30308

Office of Nuclear Reactor Regulation
Attn: Mr. Darrell G. Eisenhut, Director
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Mr. James W. Warr, Director
Alabama Water Improvement Commission
Public Health Services Building
Montgomery, Alabama 36130

FORM 1 GENERAL	U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permits Program <i>(Read the "General Instructions" before starting.)</i>	I. EPA I.D. NUMBER <div style="border: 1px solid black; padding: 2px;">F</div>																																																
II. POLLUTANT CHARACTERISTICS <div style="border: 1px solid black; padding: 5px; min-height: 100px;"> <p style="text-align: center; font-weight: bold;">PLEASE PLACE LABEL IN THIS SPACE</p> </div>		GENERAL INSTRUCTIONS <p>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 authorizations under which this data is collected.</p>																																																
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 form 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.																																																		
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:45%;">SPECIFIC QUESTIONS</th> <th style="width:10%;">YES</th> <th style="width:10%;">NO</th> <th style="width:10%;">FORM ATTACHED</th> <th style="width:45%;">SPECIFIC QUESTIONS</th> <th style="width:10%;">YES</th> <th style="width:10%;">NO</th> <th style="width:10%;">FORM ATTACHED</th> </tr> </thead> <tbody> <tr> <td>A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)</td> <td></td> <td>X</td> <td></td> <td>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)</td> <td></td> <td>X</td> <td></td> </tr> <tr> <td>C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)</td> <td>X</td> <td></td> <td>X</td> <td>D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)</td> <td></td> <td>X</td> <td></td> </tr> <tr> <td>E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)</td> <td>X</td> <td></td> <td></td> <td>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)</td> <td></td> <td>X</td> <td></td> </tr> <tr> <td>G. Do you or will you inject at this facility any produced water or 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)</td> <td></td> <td>X</td> <td></td> <td>H. 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ATTACHMENT I

NPDES CONSOLIDATED PERMIT
EPA FORM 3510-1 - ITEM X

E. Other

Local air permits from Tri-County District Health Service.

Nos. AL7080003-Z001 and AL7080003-Z002

EPA I.D. NUMBER (copy from Item 2 of Form 1)

AL8640015410

Form Approved OMB No. 158-R0173

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.

OUTFALL NO.
001

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

See instructions for additional details.

1. POLLUTANT	2. EFFLUENT						3. UNITS (specify if blank)	4. INTAKE (optional)				
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			d. LONG TERM AVERAGE VALUE		e. NO. OF ANALYSES		
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS			
a. Biochemical Oxygen Demand (BOD)	2.2	46,500					1	MG/L	LBS/DAY	2.0	42,300	1
b. Chemical Oxygen Demand (COD)	16	338,400					1	MG/L	LBS/DAY	8	169,200	1
c. Total Organic Carbon (TOC)	4.5	95,200					1	MG/L	LBS/DAY	4.4	93,100	1
d. Total Suspended Solids (TSS)	6	126,900					1	MG/L	LBS/DAY	8	169,200	1
e. Ammonia (as N)	0.03	635					1	MG/L	LBS/DAY	0.03	635	1
f. Flow	VALUE 2534.4		VALUE 2851.2		VALUE 2640.4		1-364	MGD		VALUE 2534.4		1
g. Temperature (winter)	VALUE 25.5		VALUE 48.7		VALUE 40.5		4-242		°C	VALUE 20.3		4
h. Temperature (summer)	VALUE		VALUE 52.6		VALUE 50.8		122		°C			
i. pH	MINIMUM 7.6	MAXIMUM 7.8	MINIMUM 6.2	MAXIMUM 8.9			4-149	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 2-a for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS	5. INTAKE (optional)					
	a. PRESENT	b. ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			d. LONG TERM AVERAGE VALUE		e. NO. OF ANALYSES			
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS				
a. Bromide (24959-57-8)	X		<2							1	MG/L	<2		1	
b. Chlorine, Total Residual	X		0.0							4	MG/L	0.0		4	
c. Color	X		17							1	PCU	16		1	
d. Fecal Coliform	X		63							4	N/100ML	53		4	
e. Fluoride (14984-48-8)	X		0.65	13,700						1	MG/L	LBS/DAY	0.15	3210	1
f. Nitrate-Nitrite (as N)	X		0.45	9,500						1	MG/L	LBS/DAY	0.47	9900	1

BROWNS FERRY NUCLEAR PLANT

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
AL8640015410	001

Form Approved OMB No. 158-R0173

CONTINUED FROM PAGE 3 OF FORM 2-C

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, non-process 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 to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT				4. UNITS		5. INTAKE (optional)					
	STARTING QUANTITY	END QUANTITY	CONCENTRATION	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVG. VALUE (if applicable)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	E. LONG TERM AVERAGE VALUE		D. 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)	X			<2						1	µG/L		<2		1
2M. Arsenic, Total (7440-38-2)	X			<2						1	µG/L		<2		1
3M. Beryllium, Total (7440-41-7)	X			<10						1	µG/L		<10		1
4M. Cadmium, Total (7440-43-9)	X			0.1	2					1	µG/L	LBS/DAY	<0.1		1
5M. Chromium, Total (7440-47-3)	X			<1						1	µG/L	LBS/DAY	1	21	1
6M. Copper, Total (7580-50-8)	X			<10						1	µG/L		<10		1
7M. Lead, Total (7439-97-9)	X			2	42					1	µG/L	LBS/DAY	2	42	1
8M. Mercury, Total (7439-97-9)	X			<0.2						1	µG/L		<0.2		1
9M. Nickel, Total (7440-02-0)	X			<50						1	µG/L		<50		1
10M. Selenium, Total (7782-49-2)	X			<1						1	µG/L		<1		1
11M. Silver, Total (7440-22-4)	X			<10						1	µG/L		<10		1
12M. Thallium, Total (7440-28-0)	X			<50						1	µG/L		<50		1
13M. Zinc, Total (7440-66-8)	X			20	423					1	µG/L	LBS/DAY	10	210	1
14M. Cyanide, Total (57-12-8)	X			<0.02						4	MG/L		<0.02		4
15M. Phenols, Total	X			<2						4	µG/L		<4.5		4
DIOXIN															
2,3,7,8 Tetra-chlorodibenzo-P-Dioxin (1764-01-6)				DESCRIBE RESULTS											
				X											

[illegible]

BROWNS FERRY NUCLEAR PLANT

Form Approved OMB No. 158-R0173

EPA D. NUMBER (copy from Item 1 of Form 1) OUTFALL NUMBER
001

AL8640015610

CONTINUED FROM PAGE V-6

3. EFFLUENT

4. UNITS

5. INTAKE (optional)

CONTINUED FROM PAGE V-6										ALCOHOL 50-10										CONTINUE ON REVERSE									
1. POLLUTANT AND CAS NUMBER (if available)		2. MARK 'X'		3. EFFLUENT				4. UNIT				5. LONG TERM AVERAGE VALUE				6. NO. OF ANAL. YES													
				B. MAXIMUM DAILY VALUE		C. LONG TERM AVERAGE VALUE		D. CONCENTRATION		E. MASS		F. CONCENTRATION		G. MASS		H. CONCENTRATION		I. MASS											
				CONCENTRATION		CONCENTRATION		CONCENTRATION		CONCENTRATION		CONCENTRATION		CONCENTRATION		CONCENTRATION		CONCENTRATION		CONCENTRATION									
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CONTINUE ON REVERSE

BROWNS FERRY NUCLEAR PLANT

EPA I.D. NUMBER (copy from Item 1 of Form 1) **AL864001-410** OUTFALL NUMBER **001**

Form Approved OMB No. 158-R0173

CONTINUED FROM PAGE V-8

CONTINUED FROM PAGE V-8				AL864001-410				001		FORM APPROVED					
1. POLLUTANT AND CAS NUMBER (If available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	ATMOSPHERIC RE- LEASE SO	DISEASE PRE- VENT SO	CER- TIFIED AS SENT	B. MAXIMUM DAILY VALUE		C. MAXIMUM 30 DAY VALUE (If available)		D. LONG TERM AVG. VALUE (If available)		A. NO. OF ANAL- YSES	B. CONCENT- RATION	D. MASS	E. LONG TERM AVERAGE VALUE		D. NO. OF ANAL- YSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENT- RATION	(2) MASS	
GC/MS FRACTION - PESTICIDES (continued)															
17P. Heptachlor Epoxide (102457-3)			X												
18P. PCB-1242 (63469-21-9)			X												
19P. PCB-1254 (1109789-1)			X												
20P. PCB-1221 (1110428-2)			X												
21P. PCB-1232 (1114116-6)			X												
22P. PCB-1248 (1267229-6)			X												
23P. PCB-1260 (1109882-5)			X												
24P. PCB-1016 (1267411-2)			X												
26P. Toxaphene (800136-2)			X												
PAGE V-9															

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EPA Form 3510-2C (6-80)

FOOTNOTES

- (1) Values are from grab sample data from Discharge Monitoring Reports (DMR's) for the period April 1980 through March 1981.
- (2) Two numbers are reported in some cases; the first for maximum daily and the second for long-term average.
- (3) This compound was present in the method blank and in the trip blank which indicates possible contamination.

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

AL8640015410

Form Approved OMB No. 158-R0173

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.

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

OUTFALL NO.

005

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						3. UNITS (specify if blank)	4. INTAKE (optional)			
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			d. NO. OF ANALYSES	e. LONG TERM AVERAGE VALUE		f. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	1.6	3					1	MG/L	LBS/DAY		
b. Chemical Oxygen Demand (COD)	16	34					1	MG/L	LBS/DAY		
c. Total Organic Carbon (TOC)	4	8					1	MG/L	LBS/DAY		
d. Total Suspended Solids (TSS)	11	23	9.6		6		1-12	MG/L	LBS/DAY		
e. Ammonia (as N)	0.04	0.08					1	MG/L	LBS/DAY	VALUE	
f. Flow	0.2531		0.92		0.45		1-19	MGD		VALUE	
g. Temperature (winter)	27		VALUE		VALUE		4	°C		VALUE	
h. Temperature (summer)	VALUE		VALUE		VALUE			°C		VALUE	
i. pH	MINIMUM	MAXIMUM	MINIMUM	MAXIMUM			4-13	STANDARD UNITS			
	6.1	6.9	6.3	9.2							

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 2-a for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS	5. INTAKE (optional)			
	a. PRESENT	b. ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			d. NO. OF ANALYSES	e. LONG TERM AVERAGE VALUE		f. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-67-9)	X		<2						1	MG/L			
b. Chlorine, Total Residual	X		0.0						4	MG/L			
c. Color	X		20						1	PCU			
d. Fecal Coliform	X		35						4	N/100ML			
e. Fluoride (10984-48-9)	X		0.12	0.25					1	MG/L	LBS/DAY		
f. Nitrate-Nitrite (as N)	X		0.49	1					1	MG/L	LBS/DAY		

BROWNS FERRY NUCLEAR PLANT

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AL8640015410	005

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CONTINUED FROM PAGE 3 OF FORM 2-C

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, non-process 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 to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (*all seven pages*) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT				4. UNITS		5. INTAKE (optional)					
	EPA INDUSTRY REQUIREMENTS	D. DE- LISTED POLLUTANT	C. RE- LISTED POLLUTANT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVG. VALUE (if available)		D. NO. OF ANALYSES	A. CONCENTRATION	B. MASS	E. LONG TERM AVERAGE VALUE		D. 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)	X			<2						1	µG/L				
2M. Arsenic, Total (7440-38-2)	X			<2						1	µG/L				
3M. Beryllium, Total (7440-41-7)	X			<10						1	µG/L				
4M. Cadmium, Total (7440-43-9)	X			0.2	0.0004					1	µG/L	LBS/DAY			
5M. Chromium, Total (7440-47-3)	X			<1						1	µG/L				
6M. Copper, Total (7440-50-8)	X			<10						1	µG/L				
7M. Lead, Total (7439-97-9)	X			7	0.01					1	µG/L	LBS/DAY			
8M. Mercury, Total (7439-97-6)	X			<0.2						1	µG/L				
9M. Nickel, Total (7440-02-0)	X			<50						1	µG/L				
10M. Selenium, Total (7782-49-2)	X			<1						1	µG/L				
11M. Silver, Total (7440-22-4)	X			<10						1	µG/L				
12M. Thallium, Total (7440-28-0)	X			<50						1	µG/L				
13M. Zinc, Total (7440-66-8)	X			20	0.04					1	µG/L	LBS/DAY			
14M. Cyanide, Total (57-12-6)	X			<0.02						4	MG/L				
15M. Phenols, Total	X			3.3	0.007					4	µG/L	LBS/DAY			
DIOXIN															
2,3,7,8-Tetrachlorodibenzo P-Dioxin (1784-01-6)			X	DESCRIBE RESULTS											

CONTINUE ON REVERSE

005

CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X' (if available)	3. EFFLUENT		4. UNITS		5. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS	6. NO. OF ANAL. YES	7. LONG TERM AVERAGE VALUE (1) CONCENTRATION (2) MASS	8. NO. OF ANAL. YES	
		8. MAXIMUM DAILY VALUE (1) CONCENTRATION (2) MASS	9. MAXIMUM 30 DAY VALUE (1) CONCENTRATION (2) MASS	10. CONCENTRATION	11. MASS					
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)										
22V. Methylene Chloride (76-09-2)	X						1	1	1	1
23V. 1,1,2,2-Tetrachloroethane (78-34-6)	X						1	1	1	1
24V. Tetrachloroethylene (127-18-4)	X						1	1	1	1
25V. Toluene (108-88-3)	X						1	1	1	1
26V. 1,2-Trendichloroethylene (156-60-8)	X						1	1	1	1
27V. 1,1,1-Trichloroethane (71-85-6)	X						1	1	1	1
28V. 1,1,2-Trichloroethane (78-00-8)	X						1	1	1	1
29V. Trichloroethylene (78-01-8)	X						1	1	1	1
30V. Trichlorofluoromethane (75-82-4)	X						1	1	1	1
31V. Vinyl Chloride (78-01-4)	X						1	1	1	1
GC/MS FRACTION - AROMATIC COMPOUNDS										
1A. 2-Chlorophenol (95-07-8)	X						1	1	1	1
2A. 2,4-Dichlorophenol (120-83-2)	X						1	1	1	1
3A. 2,4-Dimethylphenol (106-67-9)	X						1	1	1	1
4A. 4,6-Dinitro-2-Cresol (83-43-1)	X						1	1	1	1
5A. 2,4-Dinitrophenol (81-57-1)	X						1	1	1	1
6A. 2-Nitrophenol (85-75-5)	X						1	1	1	1
7A. 4-Nitrophenol (100-02-7)	X						1	1	1	1
8A. P-Chloro M-Cresol (85-90-7)	X						1	1	1	1
9A. Pentachlorophenyl (87-86-6)	X						1	1	1	1
10A. Phenol (108-95-2)	X						1	1	1	1
11A. 2,4,6-Trichlorophenol (88-06-2)	X						1	1	1	1

BROWNS FERRY NUCLEAR PLANT

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CONTINUED FROM PAGE V-3										3. EFFLUENT				4. UNITS		5. LONG TERM AVERAGE VALUE		6. NO. OF ANAL. YSES		7. LONG TERM AVERAGE VALUE		8. NO. OF ANAL. YSES				
1. POLLUTANT AND CAS NUMBER (if available)										2. MARK 'E' (if available)		a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		LONG TERM AVG. VALUE (if available)		CONCENTRATION		MASS		CONCENTRATION		MASS		
												(i) concentration		(i) concentration		(i) concentration		(i) mass		(i) mass		(i) mass		(i) mass		
GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)																										
22B. 1,4 Dichlorobenzene (106-46-7)										X		<10													1	µG/L
23B. 3,3'-Dichlorobenzidine (91-94-1)										X		<10													1	µG/L
24B. Diethyl Phthalate (84-66-5)										X		<10													1	µG/L
25B. Diethyl Phthalate (131-11-3)										X		<10													1	µG/L
26B. Di-N-Butyl Phthalate (84-74-2)										X		<10													1	µG/L
27B. 2,4-Dinitrotoluene (121-14-2)										X		<10													1	µG/L
28B. 2,6-Dinitrotoluene (606-20-2)										X		<10													1	µG/L
29B. Di-N-Octyl Phthalate (117-84-0)										X		<10													1	µG/L
30B. 1,2-Diphenylhydrazine (as Azobenzene) (122-66-7)										X		<10													1	µG/L
31B. Fluorenone (206-44-0)										X		<10													1	µG/L
32B. Fluorene (86-73-7)										X		<10													1	µG/L
33B. Hexachlorobenzene (118-71-1)										X		<10													1	µG/L
34B. Hexachlorobutadiene (87-68-3)										X		<10													1	µG/L
35B. Hexachlorocyclopentadiene (77-47-4)										X		<10													1	µG/L
36B. Hexachloroethane (67-72-1)										X		<10													1	µG/L
37B. Indeno (1,2,3-cd) Pyrene (193-39-6)										X		<25													1	µG/L
38B. Isophorone (78-69-1)										X		<10													1	µG/L
39B. Naphthalene (91-20-3)										X		<10													1	µG/L
40B. Nitrobenzene (98-95-3)										X		<10													1	µG/L
41B. N-Nitrosodimethylamine (62-76-9)										X		<10													1	µG/L
42B. N-Nitrosodimethylamine (62-76-9)										X		<10													1	µG/L

CONTINUE ON REVERSE

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CONTINUE ON REVERSE

BROWNS FERRY NUCLEAR PLANT

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CONTINUED FROM PAGE V-8

CONTINUED FROM PAGE V-8		AL8640015410		005		3. EFFLUENT		4. UNITS		5. INTAKE (optional)	
1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		B. MAXIMUM DAILY VALUE		C. LONG TERM AVG. VALUE (if available)		D. NO. OF ANAL. YSES	E. CONCEN- TRATION	F. MASS	G. LONG TERM AVERAGE VALUE (1) CONCEN- TRATION (2) MASS	H. NO. OF ANAL. YSES
	D. NO. OF ANAL. YSES	C. CAS NO.	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS					
PC/MS FRACTION - PESTICIDES (continued)											
7P. Heptachlor epoxide 1024-67-3)		X									
8P. PCB-1242 (53469-21-9)		X									
19P. PCB-1254 (1109-69-1)		X									
20P. PCB-1221 (11104-28-2)		X									
21P. PCB-1232 (11141-16-6)		X									
22P. PCB-1248 (12672-29-6)		X									
23P. PCB-1260 (11098-92-6)		X									
24P. PCB-1018 (12874-11-2)		X									
25P. Toxaphene (8001-35-2)		X									

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FOOTNOTES

- Values are from grab sample data from Discharge Monitoring Report (DMR's) for the period April 1980 through March 1981.
- Two numbers are reported in some cases; the first for maximum daily and the second for long-term average.

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OUTFALL NO.

006

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.

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						3. UNITS (specify if blank)	4. INTAKE (optional)			
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			d. NO. OF ANALYSES	e. LONG TERM AVERAGE VALUE		f. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	110	22	>120		>29.98		1-13	MG/L	LBS/DAY		
b. Chemical Oxygen Demand (COD)	210	41					1	MG/L	LBS/DAY		
c. Total Organic Carbon (TOC)	52	10					1	MG/L	LBS/DAY		
d. Total Suspended Solids (TSS)	39	8			39		1-13	MG/L	LBS/DAY		
e. Ammonia (as N)	34	7	100				1	MG/L	LBS/DAY	VALUE	
f. Flow	0.024		0.021		0.006		8-337	MGD		VALUE	
g. Temperature (winter)	18.0						4	°C		VALUE	
h. Temperature (summer)								°C		VALUE	
i. pH	7.5	7.7	6.7	8.8			4-365	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 2-a for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT						4. UNITS	5. INTAKE (optional)			
	a. PRESENT	b. ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			d. NO. OF ANALYSES	e. LONG TERM AVERAGE VALUE		f. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS			(1) CONCENTRATION	(2) MASS	
a. Bromide (24950-87-8)		X											
b. Chlorine, Total Residual	X		0.26	0.05					4	MG/L	LBS/DAY		
c. Color	X		110						1	PCU			
d. Fecal Coliform	X		13		250			<71.3	4-14	N/100ML			
e. Fluoride (15984-48-8)		X											
f. Nitrate-Nitrite (as N)	X		13	3					1	MG/L	LBS/DAY		

BROWNS FERRY NUCLEAR PLANT

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EPA ID. NUMBER (copy from Item 1 of Form 1) OUTFALL NUMBER

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CONTINUED FROM PAGE 3 OF FORM 2-C

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, non-process 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 to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT NUMBER (if available)	2. MARK 'X'			3. EFFLUENT			4. UNITS			5. INTAKE (optional)	
	2-a	2-b	2-c	3-a	3-b	3-c	4-a	4-b	4-c	5-a	5-b
METALS, CYANIDE, AND TOTAL PHENOLS											
1M. Antimony, Total (7440 36 0)			X								
2M. Arsenic, Total (7440 36 2)			X								
3M. Beryllium, Total (7440 41 7)			X								
4M. Cadmium, Total (7440 43 9)			X								
5M. Chromium, Total (7440 47 3)			X								
6M. Copper, Total (7440 50 8)			X								
7M. Lead, Total (7439 87 8)			X								
8M. Mercury, Total (7439 87 0)			X								
9M. Nickel, Total (7440 02 0)			X								
10M. Selenium, Total (782 49 2)			X								
11M. Silver, Total (7440 22 4)			X								
12M. Thallium, Total (7440 28 0)			X								
13M. Zinc, Total (7440 66 6)			X								
14M. Cyanide, Total (57 12 5)			X								
15M. Phenols, Total	X			14.8	0.003		4	µG/L	1BS/DAY		

DESCRIBE RESULTS

2,3,7,8 Tetra-chlorodibenzo-P-Dioxin (1764 01 6)

X

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BROWNS FERRY NUCLEAR PLANT

Form Approved OMB No. 158-R0173

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

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AL8640015610

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1. POLLUTANT NUMBER (if available)	2. MARK 'X'		3. EFFLUENT				4. UNITS		5. INTAKE (optional)		6. NO. OF ANAL. YES
	DOES POLLUTANT AFFECT ENVIRONMENT (if available)	DOES POLLUTANT AFFECT ENVIRONMENT (if available)	D. MAXIMUM DAILY VALUE (if available)	E. MAXIMUM CONCENTRATION (if available)	F. LONG TERM AVERAGE VALUE (if available)	G. NO. OF ANAL. YES	H. CONCENTRATION	I. MASS	J. LONG TERM AVERAGE VALUE (if available)	K. MASS	
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)											
22V. Methylene Chloride (75-09-2)		X									
23V. 1,1,2,2-Tetrachloroethane (79-34-8)		X									
24V. Tetrachloroethylene (127-18-4)		X									
25V. Toluene (108-88-3)		X									
26V. 1,2,3,4-Tetrachlorobenzene (1186-60-8)		X									
27V. 1,1,1-Trichloroethane (71-93-6)		X									
28V. 1,1,2-Trichloroethane (79-00-5)		X									
29V. Trichloroethylene (79-01-8)		X									
30V. Trichlorofluoromethane (89-03-4)		X									
31V. Vinyl Chloride (78-01-4)		X									
GC/MS FRACTION - ACID COMPOUNDS											
1A. 2-Chlorophenol (95-07-8)		X									
2A. 2,4-Dichlorophenol (120-4-2)		X									
3A. 2,4-Dimethylphenol (108-87-9)		X									
4A. 4,6-Dinitro-Cresol (534-82-1)		X									
5A. 4-Dinitrophenol (51-28-5)		X									
6A. 2-Nitrophenol (88-70-5)		X									
7A. 4-Nitrophenol (100-02-7)		X									
8A. P-Chloro-M-Cresol (88-60-7)		X									
9A. Pentachlorophenol (87-86-8)		X									
10A. Phenol (108-95-2)		X									
11A. 2,4,6-Trichlorophenol (88-06-2)		X									

CONTINUE ON REVERSE

EPA ID NUMBER (copy from Item 1 of Form 1) OUTFALL NUMBER

006

AL8660015610

CONTINUED FROM PAGE V-6

3. EFFLUENT

4. UNITS

5. LONG TERM AVERAGE VALUE (optional)

6. NO. OF ANAL. YRS.

7. LONG TERM AVERAGE VALUE (optional)

8. CONCENTRATION

9. MASS

10. NO. OF ANAL. YRS.

11. LONG TERM AVERAGE VALUE (optional)

12. CONCENTRATION

13. MASS

14. NO. OF ANAL. YRS.

15. LONG TERM AVERAGE VALUE (optional)

16. CONCENTRATION

17. MASS

18. NO. OF ANAL. YRS.

19. LONG TERM AVERAGE VALUE (optional)

20. CONCENTRATION

21. MASS

22. NO. OF ANAL. YRS.

GC/MS FRACTION - BASE/NEUTRAL COMPOUNDS (continued)

GC/MS FRACTION	
22B. 1,4 Dichlorobenzene (106-46-7)	
23B. 3,3' Dichlorobenzidine (91-94-1)	
24B. Diethyl Phthalate (84-66-2)	
25B. Dimethyl Phthalate (131-11-3)	
26B. Di-N-Butyl Phthalate (84-74-2)	
27B. 2,4 Dinitrotoluene (121-14-2)	
28B. 2,6 Dinitrotoluene (806-20-2)	
29B. Di-N-Octyl Phthalate (117-84-0)	
30B. 1,2 Diphenylhydrazine (as Alcobenzene) (122-66-7)	
31B. Fluoranthene (206-44-0)	
32B. Fluorene (86-73-7)	
33B. Hexachlorobenzene (118-71-1)	
34B. Hexachlorobutadiene (87-68-3)	
35B. Hexachlorocyclopentadiene (177-47-4)	
36B. Hexachloroethane (67-72-1)	
37B. Indeno (1,2,3-cd) Pyrene (193-35-5)	
38B. Isopharone (78-69-1)	
39B. Naphthalene (91-20-3)	
40B. Nitrobenzene (98-96-3)	
41B. N Nitrosodimethylaniline (62-76-9)	
42B. N Nitrosodipropylamine (621-64-7)	

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CONTINUE ON REVERSE

BROWNS FERRY NUCLEAR PLANT

EPA I.D. NUMBER (copy from Item 1 of Form 1) OUTFALL NUMBER									
AL8640015410 006									
Form Approved OMB No. 158-R0173									
CONTINUED FROM PAGE V-8									
1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT		4. UNITS		5. INTAKE (optional)		6. NO. OF ANALYSES
	12-11-80	12-11-80	12-11-80	12-11-80	12-11-80	12-11-80	12-11-80	12-11-80	
GC/MS FRACTION - PESTICIDES (continued)									
17P. Heptachlor Epoxide (1024-57-3)									
18P. PCB-1242 (83469-21-8)									
19P. PCB-1254 (11097-89-1)									
20P. PCB-1221 (11104-28-2)									
21P. PCB-1232 (11141-18-0)									
22P. PCB-1248 (12672-29-6)									
23P. PCB-1260 (11098-82-6)									
24P. PCB-1018 (12674-11-2)									
25P. Toxaphene (8001-35-2)									

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FOOTNOTES

- Values are from grab sample data from Discharge Monitoring Reports (DMR's) for the period April 1980 through March 1981.
- Two numbers are reported in some cases; the first for maximum daily and the second for long-term average.

BROWNS FERRY NUCLEAR PLANT
RAINFALL RUNOFF (1)

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

AL8640015410

Form Approved OMB No. 158-R0173

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.

OUTFALL NO.
018

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						3. UNITS (specify if blank)	4. INTAKE (optional)		
	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			5. LONG TERM AVERAGE VALUE		d. NO. OF ANALYSES
	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS	
a. Biochemical Oxygen Demand (BOD)	5.8	3					1	MG/L	LBS/DAY	
b. Chemical Oxygen Demand (COD)	42	22					1	MG/L	LBS/DAY	
c. Total Organic Carbon (TOC)	15	8					1	MG/L	LBS/DAY	
d. Total Suspended Solids (TSS)	42	22	255.6		113.3		1-15	MG/L	LBS/DAY	
e. Ammonia (as N)	0.16	8					1	MG/L	LBS/DAY	
f. Flow	VALUE 0.0624		VALUE 0.80		VALUE 0.29		6-15	MGD		VALUE
g. Temperature (winter)	VALUE 16		VALUE		VALUE		4	°C		VALUE
h. Temperature (summer)	VALUE		VALUE		VALUE			°C		VALUE
i. pH	MINIMUM 6.1	MAXIMUM 6.4	MINIMUM 6.5	MAXIMUM 8.5			4-15	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 2-a for any pollutant, you must provide the results of at least one analysis for that pollutant. Complete one table for each outfall. See the instructions for additional details and requirements.

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT						4. UNITS	5. INTAKE (optional)		
	a. PRESENT	b. ABSENT	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)			5. LONG TERM AVERAGE VALUE		d. NO. OF ANALYSES
			(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS		(1) CONCENTRATION	(2) MASS	
a. Bromide (24959-87-9)		X										
b. Chlorine, Total Residual		X										
c. Color	X		6						1	PCU		
d. Fecal Coliform		X										
e. Fluoride (16984-48-8)		X										
f. Nitrate-Nitrite (as N)	X		0.96	0.5					1	MG/L	LBS/DAY	

BROWNS FERRY NUCLEAR PLANT
RAINFALL RUNOFF

EPA I.D. NUMBER (copy from Item 1 of Form 1)	OUTFALL NUMBER
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CONTINUED FROM PAGE 3 OF FORM 2-C

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, non-process 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 to be absent. If you mark either columns 2-a or 2-b for any pollutant, you must provide the results of at least one analysis for that pollutant. Note that there are seven pages to this part; please review each carefully. Complete one table (all seven pages) for each outfall. See instructions for additional details and requirements.

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS			5. INTAKE (optional)		
	TESTING REQUIRED	ANALYSIS REQUIRED	ANALYSIS ABSENT	A. MAXIMUM DAILY VALUE		B. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVG. VALUE (if available)		D. NO. OF ANALYSES	E. CONCENTRATION	F. MASS	G. LONG TERM AVERAGE VALUE		H. 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)			X												
2M. Arsenic, Total (7440-38-2)			X												
3M. Beryllium, Total (7440-81-7)			X												
4M. Cadmium, Total (7440-43-9)			X												
5M. Chromium, Total (7440-47-3)			X												
6M. Copper, Total (7550-60-8)		X		10	0.005					1	µG/L	LBS/DAY			
7M. Lead, Total (7439-97-6)		X		22	0.01					1	µG/L	LBS/DAY			
8M. Mercury, Total (7439-97-6)			X												
9M. Nickel, Total (7440-02-0)			X												
10M. Selenium, Total (7782-49-2)			X												
11M. Silver, Total (7440-22-4)			X												
12M. Thallium, Total (7440-28-0)			X												
13M. Zinc, Total (7440-66-6)		X		40	0.02					1	µG/L	LBS/DAY			
14M. Cyanide, Total (57-12-6)			X												
15M. Phenols, Total			X												
DIOXIN															
2,3,7,8 Tetrachlorodibenzo P-Dioxin (1784-01-6)			X	DESCRIBE RESULTS											

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CONTINUED FROM PAGE V-4

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		3. EFFLUENT			4. NO. OF ANAL- YSES		5. INTAKE (optional)		6. NO. OF ANAL- YSES
	max. conc. in effluent (ppm)	min. conc. in effluent (ppm)	max. conc. in effluent (ppm)	min. conc. in effluent (ppm)	max. conc. in effluent (ppm)	min. conc. in effluent (ppm)	max. conc. in effluent (ppm)	min. conc. in effluent (ppm)		
GC/MS FRACTION - VOLATILE COMPOUNDS (continued)										
22V. Methylene Chloride (75-00-2)										
23V. 1,1,2,2-Tetra- chloroethane (78-34-6)										
24V. Tetrachloro- ethylene (127-18-4)										
25V. Toluene (108-88-3)										
26V. 1,2 Trans- Dichloroethylene (156-80-9)										
27V. 1,1,2-Trif- chloroethane (71-85-6)										
28V. 1,1,2-Trif- chloroethane (79-00-1)										
29V. Trichloro- ethylene (79-01-8)										
30V. Trichloro- fluoromethane (75-89-4)										
31V. Vinyl Chloride (75-01-4)										
GC/MS FRACTION - ALKYL COMPOUNDS										
1A. 2-Chloropheno- (98-87-8)										
2A. 2,4-Dichloro- phenol (120-83-2)										
3A. 2,4-Dimethyl- phenol (105-67-9)										
4A. 4,6-Dinitro-O- Cresol (534-52-1)										
5A. 2,4-Dinitro- phenol (51-25-5)										
6A. 2-Nitrophenol (88-75-5)										
7A. 4-Nitrophenol (100-02-7)										
8A. P-Chloro-M- Cresol (58-50-7)										
9A. Pentachloro- phenol (60-89-6)										
10A. Phenol (105-90-2)										
11A. 2,4,6-Trif- chlorophenol (88-06-2)										

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CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'		3. MAXIMUM DAILY VAL	
	MAX CONC IN WATER QUIN SERV	COND IN WATER AM- PM- SERV SD	(-) CONC IN WATER AM- PM- SERV SD	(-) MAX CONC IN WATER AM- PM- SERV SD

[illegible]

BROWNS FERRY NUCLEAR PLANT
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CONTINUED FROM PAGE V-8

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. NO. OF ANALYSES	4. UNITS		5. INTAKE (optional)		
				B. MAXIMUM DAILY VALUE		D. MAXIMUM 30 DAY VALUE (if available)		C. LONG TERM AVG. VALUE (if available)			A. CONCENTRATION	L. MASS	B. LONG TERM AVERAGE VALUE		D. NO. OF ANALYSES
				(i) CONCENTRATION	(ii) MASS	(i) CONCENTRATION	(ii) MASS	(i) CONCENTRATION	(ii) MASS				(i) CONCENTRATION	(ii) MASS	
GC/MS FRACTION - PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-57-3)			X												
18P. PCB-1242 (53469-21-9)			X												
19P. PCB-1254 (11097-69-1)			X												
20P. PCB-1221 (11104-28-2)			X												
21P. PCB-1232 (11141-16-5)			X												
22P. PCB-1248 (12672-29-6)			X												
23P. PCB-1260 (11098-82-5)			X												
24P. PCB 1015 (12674-11-2)			X												
25P. Toxaphene (8001-35-2)			X												

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FOOTNOTES

- Data used to calculate the maximum 30-day value and long-term average value are from samples collected at the permitted sample location for serial discharge number 018 and reported in the Discharge Monitoring Reports for April 1980 through March 1981. However, data given for the maximum daily value are from an 8-hour composite sample taken within the construction drainage ditch upstream of the permitted sample location for SDN 018.
- Two numbers are reported in some cases; the first for maximum daily and the second for long-term average.