

Lewis Sumner
Vice President
Hatch Project Support

Southern Nuclear
Operating Company, Inc.
40 Inverness Parkway
Post Office Box 1295
Birmingham, Alabama 35201
Tel 205.992.7279
Fax 205.992.0341



May 7, 1997

Docket Nos. 50-321
50-366

HL-5395

U. S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D. C. 20555

Edwin I. Hatch Nuclear Plant
NPDES Permit Renewal Application

Gentlemen:

Enclosed in accordance with Section 3.2 of the Hatch Nuclear Plant Environmental Protection Plan (Units 1 & 2), Appendix B to Facility Operating Licenses Nos. DPR-57 and NPF-5, is a copy of the package for renewal of the National Pollutant Discharge Elimination System (NPDES) Permit No. GA0004120 submitted to the State of Georgia Environmental Protection Division.

Should you have questions or comments, please advise.

Sincerely,

H. L. Sumner, Jr.

KWB/ld

Enclosure: Application for Permit Renewal

cc: Southern Nuclear Operating Company
P. H. Wells, Nuclear Plant General Manager
NORMS

U. S. Nuclear Regulatory Commission, Washington, D. C.

Mr. K. N. Jabbour, Licensing Project Manager

U. S. Nuclear Regulatory Commission, Region II

Mr. R. L. Reyes, Regional Administrator

Mr. B. L. Holbrook, Senior Resident Inspector

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9705140089 970507
PDR ADOCK 05000321
P PDR



APPLICATION FOR PERMIT RENEWAL

NPDES PERMIT GA0004120

Edwin I. Hatch Nuclear Plant

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

ENCLOSURE 1
TO ENV-97-055


EPA FORM 1 GENERAL

**General Information
Consolidated Permits Program**

Edwin I. Hatch Nuclear Plant

EPA FORM 3510-1 (8-90)

CONTINUE ON REVERSE

VII. SIC CODES (4-digit, in order of priority)												
A. FIRST						B. SECOND						
C	(specify)					C	(specify)					
7	4911	Generation of Electricity				7						
15	16	17	18	19		15	16	17	18	19		
C. THIRD						D. FOURTH						
C	(specify)					C	(specify)					
7						7						
15	16	17	18	19		15	16	17	18	19		
VIII. OPERATOR INFORMATION												
A. NAME										B. Is the name listed in Item VIII-A also the owner?		
C											<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
8	Southern Nuclear Operating Company										66	
15	16	17	18	19	20	21	22	23	24	25	26	
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 = PRIVATE		O = OTHER (specify)		C				
S = STATE								A	205		992	
								15	16	17	18	
									19	20	21	
									22	23	24	
									25	26	27	
E. STREET OR P.O. BOX												
P. O. Box 1295												
28												
55												
F. CITY OR TOWN						G. STATE		H. ZIP CODE		IX. INDIAN LAND		
C										Is the facility located on Indian lands?		
B	Birmingham					AL		35201		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
15	16	17	18	19	20	21	22	23	24	25	26	
X. EXISTING ENVIRONMENTAL PERMITS												
A. NPDES (Discharges to Surface Water)						D. PSD (Air Emissions from Proposed Sources)						
C	T	I				C	T	I				
9	N		GA0004120			9	P					
15	16	17	18	19	20	15	16	17	18	19	20	
B. UIC (Underground Injection of Fluids)						E. OTHER (specify)						
C	T	I				C	T	I	(specify)			
9	U					9			See Attachment 1.			
15	16	17	18	19	20	15	16	17	18	19	20	
C. RCRA (Hazardous Wastes)						E. OTHER (specify)						
C	T	I				C	T	I	(specify)			
9	R					9						
15	16	17	18	19	20	15	16	17	18	19	20	
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 using nuclear power. Plant Hatch is jointly owned by Georgia Power Company, Oglethorpe Power Corporation, Municipal Electric Authority of Georgia, and the City of Dalton, Georgia.												
XII. 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			
H. L. Sumner, Jr., Vice President									4/25/87			
COMMENTS FOR OFFICIAL USE ONLY												
C												
C												
15	16	17	18	19	20	21	22	23	24	25	26	

Attachment 1
Form 1

Item X.E
Other Environmental Permits

<u>Permit</u>	<u>Permit Number</u>
Air	4911-001-7263-0
Title V Synthetic Minor	Application No. 8771
Surface Water	001-0690-01
Drinking Water	0010005 (Plant) 0010011 (Recreation Area)
Groundwater	001-0001
Dredging	940003870 (Maintenance) 199101536 (Weir)
Solid Waste	001-004D (L) (I)
Hazardous Waste	GAD000612564 (I.D. No. only)

EPA FORM 2C NPDES

Application for Permit to Discharge Wastewater

**Existing Manufacturing, Commercial, Mining, and Silvicultural
Operations**

Consolidated Permits Program

Edwin I. Hatch Nuclear Plant

Form Approved.
OMB No. 2040-0086
Approval expires 7-31-88

C. Except for storm runoff, leaks, or spills, are any of the discharges described in Items 11-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	
01B	Unit 1 Cooling Tower Flume Overflow			See Table 2C-1				
01E	Unit 1 Low Volume Wastes (Liquid Radwaste)							
01G	Unit 1 Low Volume Wastes (Makeup Demineralizer)							
01H	Unit 1 Low Volume Waste (Pressure Filter Backwash)							
01I	Unit 1 Cooling Tower Basin Drain							
02B	Unit 2 Cooling Tower Basin Overflow to Storm Drains							
02C	Unit 2 Cooling Tower Flume Overflow							
02E	Unit 2 Low Volume Waste (Liquid Radwaste)							
03	Intake Screen Backwash							
03A	Intake Strainer Backwash							
04	Chiller Water Blowdown/Draining							

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

a. QUANTITY PER DAY	b. UNITS OF MEASURE	c. OPERATION, PRODUCT, MATERIAL, ETC. (specify)	(list outfall numbers)

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

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 PAGE 2

V. INTAKE AND EFFLUENT CHARACTERISTICS

A, B, & C: See instructions before proceeding - Complete one set of tables for each outfall - Annotate the outfall number in the space provided.

NOTE: Tables V-A, V-B, and V-C are included on separate sheets numbered V-1 through V-9.

D. Use the space below to list any of the pollutants listed in Table 2c-3 of the instructions, which you know or have reason to believe is discharged or may be discharged from any outfall. For every pollutant you list, briefly describe the reasons you believe it to be present and report any analytical data in your possession.

1. POLLUTANT	2. SOURCE	1. POLLUTANT	2. SOURCE
None			

VI. POTENTIAL DISCHARGES NOT COVERED BY ANALYSIS

Is any pollutant listed in Item V-C 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 Item VI-B)

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 purposes below)

☒ NO (go to Section VIII)

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) 664-6182	All except pH, temperature, and residual chlorine

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)

H. L. Sumner, Jr.

B. PHONE NO. (Area code & no.)

(205) 992-7279

C. SIGNATURE

H. L. Sumner

D. DATE SIGNED

4/25/97

Table 2C-1
Intermittent and Miscellaneous Flows
EPA Form 2C Section II.C.
Page 1 of 3

E. I. Hatch Nuclear Plant
NPDES Permit No. GA0004120

Outfall	Description of Flow
01B - Unit 1 Cooling Tower Flume Overflow	This point is utilized as an alternative to the blowdown valve to control the level in the Unit 1 cooling tower basin. The discharge from this point is routed to the same outfall point and is monitored for the same parameters as Unit 1 cooling tower blowdown (OSN01A) when chemical treatment is performed. The maximum flow is 34,000 gpm and the average flow during 1996 was 13,560 gpm when in service.
01E - Unit 1 Low Volume Waste (Liquid Radwaste)	Liquid radwaste is released on a batch basis. The frequency of release is variable and depends on radwaste system operation frequency. Average flow is 65 gpm (100 gpm maximum); duration is normally 2 hours per batch. Total system capacity is 38,000 gal.
01G - Low Volume Waste (Makeup Demineralizer/ Neutralization Tank)	Discharge from the makeup demineralizer regeneration occurs on a batch basis. The frequency of release is dependent on operation of the demineralizers. Average flow is 320 gpm (650 gpm maximum); duration of discharge is normally 1.5 hours per event.
01H - Low Volume Waste (Pressure Filter Backwash)	This point is utilized for pressure filter backwash and other miscellaneous flows such as pump seal water, valve leakoffs, and miscellaneous low-volume non-contact cooling water. Discharge from the pressure filter backwash occurs on a per event basis. The frequency of backwash is dependent on operation of the pressure filter system but is generally once each month. Average flow for this stream during 1996 was about 250 gpm and 710 gpm, respectively, for 40 minutes each during a 2-week period.
01J - Unit 1 Cooling Tower Flume Overflow	This point is utilized as an alternative to the blowdown valve to control the level in the Unit 2 cooling tower system. The discharge from this point is monitored for the same parameters as the Unit 1 cooling tower blowdown (OSN01A) when chemical treatment is performed. Maximum flow is approximately 34,000 gpm when in service.

Table 2C-1
Intermittent and Miscellaneous Flows
EPA Form 2C Section II.C.
Page 2 of 3

E. I. Hatch Nuclear Plant
NPDES Permit No. GA0004120

Outfall	Description of Flow
01I - Unit 1 Cooling Tower Basin Drains	The Unit 1 cooling tower basin drains are utilized during outages to drain the cooling tower system to support outage related cooling tower maintenance. The discharge volume is approximately 3.5 million gallons discharged over a 48-hour period. The discharge is monitored for FAC, TRC, Zn, and Cr prior to discharge. Results are reported in the quarterly Operational Monitoring Report.
02B - Unit 2 Cooling Tower Basin Overflow to Storm Drains	This point is utilized for monitoring Unit 2 cooling tower basin overflows to storm drains, which occur on an infrequent basis. Monitoring is consistent with requirements for Unit 2 cooling tower blowdown (OSN02A). It is also used during outages to drain the Unit 2 cooling tower system. The maximum discharge volume is approximately 3.5 million gallons discharged over a 48-hour period.
02C - Unit 2 Cooling Tower Flume Overflow	This point is utilized periodically as an alternative to the blowdown valve to control the level in the Unit 2 cooling tower system. The discharge from this point is monitored for the same parameters as the Unit 2 cooling tower blowdown (OSN02A) when chemical treatment is performed. Average flow is approximately 8000 gpm when in service.
02E - Unit 2 Low Volume Waste (Liquid Radwaste)	Liquid radwaste is released on a batch basis. The frequency of release is variable and depends on radwaste system operation frequency. Average flow is 65 gpm (100 gpm maximum). Duration is normally 2 hours per batch.
03 - Intake Screen Backwash	The intake screens are backwashed approximately once per shift. The average flow is 412 gpm (500 gpm maximum). Duration of backwash varies but is generally less than 15 minutes.

Table 2C-1
Intermittent and Miscellaneous Flows
EPA Form 2C Section II.C.
Page 3 of 3

E. I. Hatch Nuclear Plant
NPDES Permit No. GA0004120

Outfall

Description of Discharge

03A - Intake Strainer Backwash

The Plant Service Water intake lines are equipped with strainers to remove small debris entrained in the water by pump operation. Each strainer is backwashed with service water approximately once per shift at an average flow of approximately 412 gpm. The discharge from the strainer backwash is routed through a 12-inch line into a stillwell area on the downstream side of the intake structure where it is ultimately discharged to the Altamaha River.

**04 - Chiller Water Blowdown/
Draining**

This point is currently permitted to receive blowdown and draining from the 2P65 Chiller Water system only. The proposed revision to this OSN is provided to include discharge from other cooling water systems, including a new Turbine Building Chilled Water Cooling Tower system. Blowdown from these systems is intermittent and will average less than 20 gpm. Draining of these systems occurs on an infrequent basis and is normally associated with maintenance operations. Other smaller cooling water systems may also be periodically drained to the yard drain system. Current EPD approval allows draining the 2P65 chiller system and other chiller systems containing sodium nitrite as a corrosion inhibitor. Concentrations of sodium nitrite are maintained in the range of 500 to 2000 ppm with a typical drainage rate of up to 65 gpm. An alternate corrosion inhibitor has been proposed for use in these systems. Any subsequent changes in water treatment chemicals or corrosion inhibitors will be managed in accordance with permit requirements. Corrshield (Betz Dearborn, Inc.) is currently proposed as a substitute for sodium nitrite as the corrosion inhibitor in chiller systems at Plant Hatch. Corrshield contains tolytriazole (about 17.5 ppm maximum), disodium molybdate (about 1.2- to 3.5-ppm molybdenum), and a dispersant. Tolytriazole, the most toxic component of Corrshield, will be used at a concentration of only 8.3 percent of its NOEL value of 210 ppm for *Daphnia magna*.

**EPA FORM 2C
SECTION V**

Intake and Effluent Characteristics

Consolidated Permits Program

Edwin I. Hatch Nuclear Plant

Unit 1

Unit One

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)

Form Approved
OMB No. 2040-0086
Approval expires 7-31-

88

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

OUTFALL
NO.
01

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 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	
a. Biochemical Oxygen Demand (BOD)	1	259.2					1	mg/L	lb/day	1	531.6	1
b. Chemical Oxygen Demand (COD)	4	1036.8					1	mg/L	lb/day	6	3189.6	1
c. Total Organic Carbon (TOC)	4.10	1062.7					1	mg/L	lb/day	2.39	1270.5	1
d. Total Suspended Solids (TSS)	26	6739.3					1	mg/L	lb/day	15	7974.0	1
e. Ammonia (as N)	<0.01	<2.59								<0.01	<5.32	1
f. Flow	VALUE 21,600		VALUE		VALUE		8	GPM		VALUE 44,300		
g. Temperature (winter)	VALUE		VALUE		VALUE 18.3		historical	°C		VALUE 12.2		historical
h. Temperature (summer)	VALUE 27.5		VALUE		VALUE		8	°C		VALUE 24.9		8
i. pH	MINIMUM 6.7	MAXIMUM 8.7	MINIMUM	MAXIMUM			8	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 limitations 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 for 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'		3. EFFLUENT						4. UNITS		5. 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 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	
a. Bromide (24959-67-9)	X		0.10	25.92					1	mg/L	lb/day	0.03	15.95	1
b. Chlorine, Total Residual	X		<0.01	<2.59					5	mg/L	lb/day	<0.01	<5.32	5
c. Color	X		22						1	pcu		21		1
d. Fecal Coliform	X		15						1	col/100mL		10		1
e. Fluoride (16984-48-8)	X		0.40	103.68					1	mg/L	lb/day	0.17	90.37	1
f. Nitrate-Nitrite (as N)	X		1.32	342.14					1	mg/L	lb/day	0.33	175.43	1

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK 'X'		3. EFFLUENT							4. UNITS		5. 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 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	
g. Nitrogen, Total Organic (as N)	X		0.48	124.42					1	mg/L	lb/day	0.21	111.64	1
h. Oil and Grease	X		<1.0	<259.29					1	mg/L	lb/day	<1.0	<531.60	1
i. Phosphorus (as P) Total (7723-14-0)	X		0.152	39.40					1	mg/L	lb/day	0.058	30.83	1
J. Radioactivity														
(1) Alpha, Total	X		1.1						1	pCi/L		2.9		1
(2) Beta, Total	X		1.6						1	pCi/L		3.2		1
(3) Radium, Total	X		1.3						1	pCi/L		1.5		1
(4) Radium 226, Total	X		1.5						1	pCi/L		1.6		1
k. Sulfate (as SO ₄) (14808-79-8)	X		29.0	7516.80					1	mg/L	lb/day	20.5	10,897.80	1
l. Sulfide (as SO ₂) (14265-45-3)		X	<0.01	<2.59					1	mg/L	lb/day	<0.01	<5.32	1
m. Sulfite (as SO ₂) (14265-45-3)		X	<0.25	<64.80					1	mg/L	lb/day	<0.25	<132.90	1
n. Surfactants	X		0.03	7.78					1	mg/L	lb/day	0.01	5.32	1
o. Aluminum, Total (7440-39-3)	X		1.76	456.19					1	mg/L	lb/day	1.02	542.23	1
p. Barium, Total (7440-39-3)	X		0.038	9.85					1	mg/L	lb/day	0.025	13.29	1
q. Boron, Total (7440-42-8)		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
r. Cobalt, Total (7440-48-4)		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
s. Iron, Total (7439-89-6)	X		1.65	427.68					1	mg/L	lb/day	0.853	453.46	1
t. Magnesium, Total (7439-95-4)	X		2.58	668.74					1	mg/L	lb/day	1.83	972.83	1
u. Molybdenum, Total (7439-98-7)	X		<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
v. Manganese, Total (7439-96-5)	X		0.124	32.14					1	mg/L	lb/day	0.058	30.83	1
w. Tin, Total (7440-31-5)		X	<0.005	<1.30					1	mg/L	lb/day	<0.005	<2.66	1
x. Titanium, Total (7440-32-6)	X		0.055	14.26					1	mg/L	lb/day	0.037	19.67	1

CONTINUED FROM PAGE V-2

PART C -

If you are a primary industry and this outfall contains process wastewater, refer to Table 3c-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, no 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 arsenic, acrylonitrile, 2,4-dichlorophenol, 2,4-dinitrophenol, 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 it will be discharged 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 NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Test- ing Required	b. Bel- ieved Present	c. Bel- ieved Absent	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANAL- YSES	a. CONCENT- RATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANAL- YSES
				(1) CONCENT- RATION	(2) MASS	(1) CONCENT- RATION	(2) MASS	(1) CONCENT- RATION	(2) MASS				(1) CONCENT- RATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1M. Antimony, Total (7440-36-0)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
2M. Arsenic, Total (7440-38-2)	X		X	<0.005	<1.30					1	mg/L	lb/day	<0.005	<2.66	1
3M. Beryllium, Total, 7440-41-7	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
4M. Cadmium, Total (7440-43-9)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
5M. Chromium Total (7440-47-3)	X		X	<0.001	<0.26					1	mg/L	lb/day	<0.001	<0.53	1
6M. Copper, Total (7440-50-8)	X	X		0.007	1.81					1	mg/L	lb/day	<0.002	<1.06	1
7M. Lead, Total (7439-92-1)	X	X		0.007	1.81					1	mg/L	lb/day	<0.002	<1.06	1
8M. Mercury, Total (7439-97-6)	X		X	<0.0002	<0.05					1	mg/L	lb/day	<0.002	<0.11	1
9M. Nickel, Total (7440-02-0)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
10M. Selenium, Total (7782-49-2)	X		X	<0.005	<1.30					1	mg/L	lb/day	<0.005	<2.66	1
11M. Silver, Total (7440-22-4)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
12M. Thallium, Total (7440-28-0)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
13M. Zinc, Total (7440-66-6)	X	X		0.077	19.96					1	mg/L	lb/day	0.066	33.09	1
14M. Cyanide, Total (57-12-5)	X		X	<0.005	<1.30					1	mg/L	lb/day	<0.005	<2.66	1
15M. Phenols, Total	X		X	<0.01	<2.59					1	mg/L	lb/day	<0.01	5.32	1
DIOXIN															
2,3,7,8-Tetra- chlorodibenzo-P- Dioxin (1764-01-6)			X	DESCRIBE RESULTS											

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS			5. INTAKE (optional)		
	a. Test- ing Required	b. Bel- ieved Present	c. Bel- ieved Absent	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVERG. VALUE (if available)		d. NO. OF ANAL- YSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANAL- YSES
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
METALS, CYANIDE, AND TOTAL PHENOLS															
1V. Acrolein (107-02-8)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
2V. Acrylonitrile (107-13-1)	X		X	<0.001	<0.26					1	mg/L	lb/day	<0.001	<0.53	1
3V. Benzene (71-43-2)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
4V. Bis(Chloromethyl) Ether (542-88-1)			X												
5V. Bromoform (75-25-2)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
6V. Carbon Tetrachloride (56-23-5)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
7V. Chlorobenzene (108-90-7)	X		X	<0.001	<0.26					1	mg/L	lb/day	<0.001	<0.53	1
8V. Chlorodibromo- methane (124-48-1)	X		X	<0.001	<0.26					1	mg/L	lb/day	<0.001	<0.53	1
9V. Chloroethane (75-00-3)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	X		X	<0.001	<0.26					1	mg/L	lb/day	<0.001	<0.53	1
11V. Chloroform (67-66-3)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
12V. Dichlorobromo- methane (75-71-8)	X		X	<0.001	<0.26					1	mg/L	lb/day	<0.001	<0.5	1
13V. Dichlorodifluoro- methane (75-71-8)			X												
14V. 1,1-Dichloro- ethane (75-34-3)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
15V. 1,2-Dichloro- ethane (107-06-2)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
16V. 1,1-Dichloro- ethylene (75-35-4)	X		X	<0.001	<0.26					1	mg/L	lb/day	<0.001	<0.53	1
17V. 1,2-Dichloro- propane (78-87-5)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
18V. 1,3-Dichloro- propylene (542-75-6)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
19V. Ethylbenzene (100-41-4)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
20V. Methyl Bromide (74-83-9)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
21V. Methyl Chloride (74-87-3)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Test- ing	b. Bel- ieved	c. Bel- ieved	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANAL- YSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANAL- YSES
	Required	Present	Absent	(1) CONCEN- TRATION	(2) MASS	(1) CONCEN- TRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS	
GC/MS FRACTION — VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
23V. 1,1,2,2Tetra-chloroethane (79-34-5)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
24V. Tetrachloroethylene (127-18-4)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
25V. Toluene (108-88-3)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
26V. 1,2-Trans-Dichloro- ethylene (156-60-5)	X		X	<0.001	<0.26					1	mg/L	lb/day	<0.001	<0.53	1
27V. 1,1,1-Trichloroethene (71-56-6)	X		X	<0.001	<0.26					1	mg/L	lb/day	<0.001	<0.53	1
28V. 1,1,2-Trichloroethane (79-00-5)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
29V. Trichloroethylene (79-01-6)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
30V. Trichlorofluoromethane (75-69-4)			X												
31V. Vinyl Chloride (75-01-4)	X		X	<0.001	<0.26					1	mg/L	lb/day	<0.001	<0.53	1
GC/MS FRACTION — ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	X		X	<0.004	<1.04					1	mg/L	lb/day	<0.004	<2.13	1
2A. 2,4-Dichlorophenol (120-83-2)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
3A. 2,4-Dimethylphenol (105-67-9)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
4A. 4,6-Dinitro-O-Cresol (534-52-1)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
5A. 2,4-Dinitrophenol (51-28-5)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
6A. 2-Nitrophenol (88-75-5)	X		X	<0.004	<1.04					1	mg/L	lb/day	<0.004	<2.13	1
7A. 4-Nitrophenol (100-02-7)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
8A. P-Chloro-M-Cresol (59-50-7)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
9A. Pentachlorophenol (87-86-5)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
10A. Phenol (108-95-2)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
11A. 2,4,6-Trichloro-phenol (88- 06-2)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Treating 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 ANAL- YSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANAL- YSES
				(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)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
2B. Acenaphthylene (208-96-8)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
3B. Anthracene (120-12-7)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
4B. Benzidine (92-87-5)	X		X	<0.007	<1.81					1	mg/L	lb/day	<0.007	<1.81	1
5B. Benzo (a) Anthracene (56-55-3)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
6B. Benzo (a) Pyrene (50-32-8)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
7B. 3,4-Benzo-fluoranthene (205-99-2)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
8B. Benzo (ghi) Perylene (191-24-2)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
9B. Benzo (k) Fluoranthene (207-08-9)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
11B. Bis (2-Chloroethyl) Ether (111-44-4)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
12B. Bis (2-Chloro- isopropyl) Ether (102-60-1)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	X		X	<0.004	<1.04					1	mg/L	lb/day	<0.004	<2.13	1
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
15B. Butyl Benzyl Phthalate (85-68-7)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
16B. 2-Chloronaphthalene (91-58-7)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
18B. Chrysene (218-01-9)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
19B. Dibenzo (a,h) Anthracene (53-70-3)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
20B. 1,2-Dichloro- benzene (95-50-1)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
21B. 1,3-Dichloro- benzene (541-73-1)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Test- ing	b. Bel- ieved	c. Bel- ieved	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANAL- YSES	a. CON- CENTR- ATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANAL- YSES
	Required	Present	Absent	(1) CON- CENTR- ATION	(2) MASS	(1) CON- CENTR- ATION	(2) MASS	(1) CON- CENTR- ATION	(2) MASS				(1) CON- CENTR- ATION	(2) MASS	
GC/MS FRACTION --- BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichlorobenzene (106-5-7)	X		X	<0.004	<1.04					1	mg/L	lb/day	<0.004	<2.13	1
23B. 3,3-Dichlorobenzidine (91-94-1)	X		X	<0.013	<3.37					1	mg/L	lb/day	<0.013	<6.91	1
24B. Diethyl Phthalate (84-66-2)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
25B. Dimethyl Phthalate (131-11-3)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
26B. Di-n-Butyl Phthalate (84-74-2)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
27B. 2,4-Dinitrotoluene (121-14-2)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
28B. 2,6-Dinitrotoluene (606-20-2)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
29B. Di-N-OctylPhthalate (117-84-0)	X		X	<0.004	<1.04					1	mg/L	lb/day	<0.004	<2.13	1
30B. 1,2-Diphenyl-hydrazine (as Azobenzene) (122-66-7)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
31B. Fluoranthene (206-44-0)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
32B. Fluorene (86-73-7)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
33B. Hexachlorobenzene (118-74-1)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
34B. Hexachlorobutadiene (87-68-3)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
35B. Hexachlorocyclo-pentadiene (77-47-4)	X		X	<0.001	<0.26					1	mg/L	lb/day	<0.001	<0.53	1
36B. Hexachloroethane (67-72-1)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
38B. Isophorone (78-59-1)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
39B. Naphthalene (91-20-3)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
40B. Nitrobenzene (98-95-3)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
41B. N-Nitrosodimethylamine (62-75-9)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
42B. N-Nitrosodi-N-Propylamine (621-64-7)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Test- ing Required	b. Det- ected Present	c. Det- ected Absent	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG VALUE (if available)		d. NO. OF ANAL- YSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANAL- YSES
				(1) CONCEN- TRATION	(2) MASS	(1) CONCEN- TRATION	(2) MASS	(1) CONCEN- TRATION	(2) MASS				(1) CONCEN- TRATION	(2) MASS	
GC/MS FRACTION — BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitro- diphenylamine (86-30-6)	X		X	<0.003	<0.78					1	mg/L	lb/day	<0.003	<1.60	1
44B. Phenanthrene (85-01-8)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
45B. Pyrene (129-00-0)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
46B. 1,2,4-Tri- chlorobenzene (120-82-1)	X		X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1
GC/MS FRACTION — PESTICIDES															
1P. Aldrin (309-00-2)			X	<0.00002	<0.005					1	mg/L	lb/day	<0.00002	<0.01	1
2P. α -BHC (319-84-6)			X	<0.00002	<0.005					1	mg/L	lb/day	<0.00002	<0.01	1
3P. β -BHC (319-85-7)			X	<0.00002	<0.005					1	mg/L	lb/day	<0.00002	<0.01	1
4P. γ -BHC (58-89-9)			X	<0.00002	<0.005					1	mg/L	lb/day	<0.00002	<0.01	1
5P. δ -BHC (319-86-8)			X	<0.000007	<0.002					1	mg/L	lb/day	<0.000007	<0.004	1
6P. Chlordane (57-74-9)			X	<0.0005	<0.12					1	mg/L	lb/day	<0.0005	<0.27	1
7P. 4,4'-DDT (50-29-3)			X	<0.000008	<0.002					1	mg/L	lb/day	<0.000008	<0.004	1
8P. 4,4'-DDE (72-55-9)			X	<0.00002	<0.005					1	mg/L	lb/day	<0.00002	<0.01	1
9P. 4,4'-DDD (72-54-8)			X	<0.000004	<0.001					1	mg/L	lb/day	<0.000004	<0.002	1
10P. Dieldrin (60-57-1)			X	<0.000007	<0.002					1	mg/L	lb/day	<0.000007	<0.004	1
11P. α -Endosulfan (115-29-7)			X	<0.00001	<0.003					1	mg/L	lb/day	<0.00001	<0.005	1
12P. β -Endosulfan (115-29-7)			X	<0.000004	<0.001					1	mg/L	lb/day	<0.000004	<0.002	1
13P. Endosulfan Sulfate (1031-07-8)			X	<0.00002	<0.005					1	mg/L	lb/day	<0.00002	<0.01	1
14P. Endrin (72-20-8)			X	<0.00002	<0.005					1	mg/L	lb/day	<0.00002	<0.01	1
15P. Endrin Aldehyde (7421-93-4)			X	<0.00002	<0.005					1	mg/L	lb/day	<0.00002	<0.01	1
16P. Heptachlor (76-44-8)			X	<0.00002	<0.005					1	mg/L	lb/day	<0.00002	<0.01	1

CONTINUED FROM PAGE V-8

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

OUTFALL NUMBER

01

Form Approved.

OMB No. 2040-0086

Approval expires 7-31-88

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Test- ing Required	b. Bel- ieved Present	c. Pro- hibited Absent	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANAL- YSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANAL- YSES	
				(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS				(1) CONCENTRATION	(2) MASS		
GC/MS FRACTION — PESTICIDES (continued)																
17P. Heptachlor Epoxide (1024-57-3)			X	<0.00002	<0.005					1	mg/L	lb/day	<0.00002	<0.01	1	
18P. PCB-1242 (53469-21-9)			X	<0.0005	<0.13					1	mg/L	lb/day	<0.0005	<0.27	1	
19P. PCB-1254 (11097-69-1)			X	<0.0005	<0.13					1	mg/L	lb/day	<0.0005	<0.27	1	
20P. PCB-1221 (11104-28-2)			X	<0.0005	<0.13					1	mg/L	lb/day	<0.0005	<0.27	1	
21P. PCB-1232 (11141-16-5)			X	<0.0005	<0.13					1	mg/L	lb/day	<0.0005	<0.27	1	
22P. PCB-1248 (12672-29-6)			X	<0.0005	<0.13					1	mg/L	lb/day	<0.0005	<0.27	1	
23P. PCB-1260 (11096-82-5)			X	<0.0005	<0.13					1	mg/L	lb/day	<0.0005	<0.27	1	
24P. PCB-1016 (12674-11-2)			X	<0.0005	<0.13					1	mg/L	lb/day	<0.0005	<0.27	1	
25P. Toxaphene (8001-35-2)			X	<0.002	<0.52					1	mg/L	lb/day	<0.002	<1.06	1	

**EPA FORM 2C
SECTION V**

Intake and Effluent Characteristics

Consolidated Permits Program

Edwin I. Hatch Nuclear Plant

Unit 2

Unit Two

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

Form Approved
OMB No. 2040-0086
Approval expires 7-31-88

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

OUTFALL
NO.

02

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 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	
a. Biochemical Oxygen Demand (BOD)	12	1234.9					1	mg/L	lb/day	1	531.6	1
b. Chemical Oxygen Demand (COD)	13	1337.8					1	mg/L	lb/day	6	3189.6	1
c. Total Organic Carbon (TOC)	5.63	579.4					1	mg/L	lb/day	2.39	1270.5	1
d. Total Suspended Solids (TSS)	43	4424.9					1	mg/L	lb/day	15	7974.0	1
e. Ammonia (as N)	<0.01	<1.03					1	mg/L	lb/day	<0.01	<5.32	1
f. Flow	VALUE 8563		VALUE		VALUE		8	GPM		VALUE 44,300		
g. Temperature (winter)	VALUE		VALUE		VALUE 18.3		historical	°C		VALUE 10.0		historical
h. Temperature (summer)	VALUE 28.8		VALUE		VALUE		8	°C		VALUE 24.9		8
i. pH	MINIMUM 6.8	MAXIMUM 8.4	MINIMUM	MAXIMUM			8	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 limitations 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 for 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'		3. EFFLUENT						4. UNITS		5. 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 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	
a. Bromide (24959-67-9)	X		0.07	7.20					1	mg/L	lb/day	0.03	15.95	1
b. Chlorine, Total Residual	X		<0.01	<0.10					5	mg/L	lb/day	<0.01	<5.32	5
c. Color	X		14						1	pcu		21		1
d. Fecal Coliform	X		15						1	col/100mL		10		1
e. Fluoride (16984-48-8)	X		0.34	34.99					1	mg/L	lb/day	0.17	90.37	1
f. Nitrate-Nitrite (as N)	X		1.38	142.01					1	mg/L	lb/day	0.33	175.43	1

ITEM V-B CONTINUED FROM FRONT

1. POLLUTANT AND CAS NO. (if available)	2. MARK "X"		3. EFFLUENT								4. UNITS		5. 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 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		
g. Nitrogen, Total Organic (as N)	X		0.26	26.76					1	mg/L	lb/day	0.21	111.64	1	
h. Oil and Grease	X		<1.0	<102.91					1	mg/L	lb/day	<1.0	<531.60	1	
i. Phosphorus (as P) Total (7723-14-0)	X		0.774	79.65					1	mg/L	lb/day	0.058	30.83	1	
J. Radioactivity															
(1) Alpha, Total	X		1.4						1	pCi/L		2.9		1	
(2) Beta, Total	X		7.5						1	pCi/L		3.2		1	
(3) Radium, Total	X		0.2						1	pCi/L		1.5		1	
(4) Radium 226, Total	X		0.7						1	pCi/L		1.6		1	
k. Sulfate (as SO ₄) (14808-79-8)	X		16.2	1667.06					1	mg/L	lb/day	20.5	10,897.80	1	
l. Sulfide (as SO ₃) (14265-45-3)		X	<0.01	<0.10					1	mg/L	lb/day	<0.01	<5.32	1	
m. Sulfite (as SO ₃) (14265-45-3)	X		5.2	535.11					1	mg/L	lb/day	<0.25	<132.90	1	
n. Surfactants	X		0.06	6.17					1	mg/L	lb/day	0.01	5.32	1	
o. Aluminum, Total (7440-39-3)	X		2.71	278.87					1	mg/L	lb/day	1.02	542.23	1	
p. Barium, Total (7440-39-3)		X	<0.003	<0.31					1	mg/L	lb/day	0.025	13.29	1	
q. Boron, Total (7440-42-8)		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1	
r. Cobalt, Total (7440-48-4)		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1	
s. Iron, Total (7439-89-6)	X		2.23	229.48					1	mg/L	lb/day	0.853	453.46	1	
t. Magnesium, Total (7439-95-4)	X		3.22	331.35					1	mg/L	lb/day	1.83	972.83	1	
u. Molybdenum, Total (7439-98-7)	X		<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1	
v. Manganese, Total (7439-96-5)	X		0.249	25.62					1	mg/L	lb/day	0.058	30.83	1	
w. Tin, Total (7440-31-5)		X	<0.005	<0.51					1	mg/L	lb/day	<0.005	<2.66	1	
x. Titanium, Total (7440-32-6)	X		0.131	13.48					1	mg/L	lb/day	0.037	19.67	1	

PART C -

If you are a primary industry and this outfall contains process wastewater, refer to Table 2a-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 nonrequired 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 the 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 arsenic, acrylonitrile, 2,4 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 NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Test- ing Required	b. Bel- ieved Present	c. Bel- ieved Absent	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANAL- YSES	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANAL- YSES
				(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		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
2M. Arsenic, Total (7440-38-2)	X		X	<0.005	<0.51					1	mg/L	lb/day	<0.005	<2.66	1
3M. Beryllium, Total, 7440-41-7	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
4M. Cadmium, Total (7440-43-9)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
5M. Chromium Total (7440-47-3)	X		X	<0.001	<0.10					1	mg/L	lb/day	<0.001	<0.53	1
6M. Copper, Total (7440-50-8)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
7M. Lead, Total (7439-92-1)	X	X		0.011	1.13					1	mg/L	lb/day	<0.002	<1.06	1
8M. Mercury, Total (7439-97-6)	X		X	<0.0002	<0.02					1	mg/L	lb/day	<0.002	<0.11	1
9M. Nickel, Total (7440-02-0)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
10M. Selenium, Total (7782-49-2)	X		X	<0.005	<0.51					1	mg/L	lb/day	<0.005	<2.66	1
11M. Silver, Total (7440-22-4)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.05	1
12M. Thallium, Total (7440-28-0)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
13M. Zinc, Total (7440-66-6)	X	X		0.101	10.39					1	mg/L	lb/day	0.066	35.09	1
14M. Cyanide, Total (57-12-5)	X		X	<0.005	<0.51					1	mg/L	lb/day	<0.005	<2.66	1
15M. Phenols, Total	X		X	<0.01	<1.02					1	mg/L	lb/day	<0.01	5.32	1
DIOXIN															
2,3,7,8-Tetra- chlorodibenzo-P- Dioxin (1764-01-6)			X	DESCRIBE RESULTS											

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT								4. UNITS		5. INTAKE (optional)		
	a. Test- ing Required	b. Bel- ieved Present	c. Bel- ieved Absent	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANAL- YSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANAL- YSES	
				(1) CONCEN- TRATION	(2) MASS	(1) CONCEN- TRATION	(2) MASS	(1) CONCEN- TRATION	(2) MASS				(1) CONCEN- TRATION	(2) MASS		
METALS, CYANIDE, AND TOTAL PHENOLS																
1V. Acrolein (107-02-8)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1	
2V. Acrylonitrile (107-13-1)	X		X	<0.001	<0.10					1	mg/L	lb/day	<0.001	<0.53	1	
3V. Benzene (71-43-2)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1	
4V. Bis(Chloromethyl) Ether (542-88-1)			X													
5V. Bromoform (75-25-2)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1	
6V. Carbon Tetrachloride(56-23-5)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1	
7V. Chlorobenzene (108-90-7)	X		X	<0.001	<0.10					1	mg/L	lb/day	<0.001	<0.53	1	
8V. Chlorodibromo- methane (124-48-1)	X		X	<0.001	<0.10					1	mg/L	lb/day	<0.001	<0.53	1	
9V. Chloroethane (75-00-3)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1	
10V. 2-Chloro-ethylvinyl Ether (110-75-8)	X		X	<0.001	<0.10					1	mg/L	lb/day	<0.001	<0.53	1	
11V. Chloroform (67-66-3)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1	
12V. Dichlorobromo- methane (75-71-8)	X		X	<0.001	<0.10					1	mg/L	lb/day	<0.001	<0.53	1	
13V. Dichlorodifluoro- methane (75-71-8)			X													
14V. 1,1-Dichloro- ethane (75-34-3)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1	
15V. 1,2-Dichloro- ethane (107-06-2)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1	
16V. 1,1-Dichloro- ethylene (75-35-4)	X		X	<0.001	<0.10					1	mg/L	lb/day	<0.001	<0.53	1	
17V. 1,2-Dichloro- propane (78-87-5)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1	
18V. 1,3-Dichloro- propylene (542-75-6)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1	
19V. Ethylbenzene (100-41-4)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1	
20V. Methyl Bromide (74-83-9)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1	
21V. Methyl Chloride (74-87-3)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1	

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Test- ing Required	b. Bel- ieved Present	b. Bel- ieved Absent	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANAL- YSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANAL- YSES
				(1) CONCEN- TRATION	(2) MASS	(1) CONCEN- TRATION	(2) MASS	(1) CONCEN- TRATION	(2) MASS				(1) CONCEN- TRATION	(2) MASS	
GC/MS FRACTION — VOLATILE COMPOUNDS (continued)															
22V. Methylene Chloride (75-09-2)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
23V. 1,1,2,2-Tetra-chloroethane (79-34-5)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
24V. Tetrachloroethylene (127-18-4)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
25V. Toluene (108-88-3)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
26V. 1,2-Trans-Dichloro- ethylene (156-60-5)	X		X	<0.001	<0.10					1	mg/L	lb/day	<0.001	<0.53	1
27V. 1,1,1-Trichloroethene (71-56-6)	X		X	<0.001	<0.10					1	mg/L	lb/day	<0.001	<0.53	1
28V. 1,1,2-Trichloroethane (79-00-5)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
29V. Trichloroethylene (79-01-6)	X		X	<0.001	<0.10					1	mg/L	lb/day	<0.002	<1.06	1
30V. Trichlorofluoromethane (75-69-4)			X												
31V. Vinyl Chloride (75-01-4)	X		X	<0.001	<0.10					1	mg/L	lb/day	<0.001	<0.53	1
GC/MS FRACTION — ACID COMPOUNDS															
1A. 2-Chlorophenol (95-57-8)	X		X	<0.004	<0.41					1	mg/L	lb/day	<0.004	<2.13	1
2A. 2,4-Dichlorophenol (120-83-2)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
3A. 2,4-Dimethylphenol (105-67-9)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
4A. 4,6-Dinitro-O-Cresol (534-52-1)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
5A. 2,4-Dinitrophenol (51-28-5)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
6A. 2-Nitrophenol (88-75-5)	X		X	<0.004	<0.41					1	mg/L	lb/day	<0.004	<2.13	1
7A. 4-Nitrophenol (100-02-7)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
8A. P-Chloro-M-Cresol (59-50-7)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
9A. Pentachlorophenol (87-86-5)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
10A. Phenol (108-95-2)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
11A. 2,4,6-Trichloro-phenol (88- 06-2)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Test- ing	b. Bel- ieved	b. Bel- ieved	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANALY- SES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANALY- SES
	Required	Present	Absent	(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)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
2B. Acenaphthylene (208-96-8)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
3B. Anthracene (120-12-7)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
4B. Benzidine (92-87-5)	X		X	<0.007	<0.72					1	mg/L	lb/day	<0.007	<1.81	1
5B. Benzo (a) Anthracene (56-55-3)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
6B. Benzo (a) Pyrene (50-32-8)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
7B. 3,4-Benzo-fluoranthene (205-99-2)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
8B. Benzo (ghi) Perylene (191-24-2)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
9B. Benzo (k) Fluoranthene (207-08-9)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
10B. Bis (2-Chloroethoxy) Methane (111-91-1)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
11B. Bis (2-Chloroethyl) Ether (111-44-4)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
12B. Bis (2-Chloro-isopropyl) Ether (102-60-1)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
13B. Bis (2-Ethylhexyl) Phthalate (117-81-7)	X		X	<0.004	<0.41					1	mg/L	lb/day	<0.004	<2.13	1
14B. 4-Bromophenyl Phenyl Ether (101-55-3)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
15B. Butyl Benzyl Phthalate (85-68-7)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
16B. 2-Chloronaphthalene (91-58-7)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
17B. 4-Chlorophenyl Phenyl Ether (7005-72-3)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
18B. Chrysene (218-01-9)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
19B. Dibenzo (a,h) Anthracene (53-70-3)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
20B. 1,2-Dichlorobenzene (95-50-1)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
21B. 1,3-Dichlorobenzene (541-73-1)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Test- ing	b. Bel- ieved	b. Bel- ieved	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANAL- YSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANAL- YSES
	Required	Present	Absent	(1) CONCEN- TRATION	(2) MASS	(1) CONCEN- TRATION	(2) MASS	(1) CONCEN- TRATION	(2) MASS				(1) CONCEN- TRATION	(2) MASS	
GC/MS FRACTION — BASE/NEUTRAL COMPOUNDS (continued)															
22B. 1,4-Dichlorobenzene (106-46-7)	X		X	<0.004	<0.41					1	mg/L	lb/day	<0.004	<2.13	1
23B. 3,3-Dichlorobenzidine (91-94-1)	X		X	<0.013	<1.34					1	mg/L	lb/day	<0.013	<6.91	1
24B. Diethyl Phthalate (84-66-2)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
25B. Dimethyl Phthalate (131-11-3)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
26B. Di-N-Butyl Phthalate (84-74-2)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
27B. 2,4-Dinitrotoluene (121-14-2)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
28B. 2,6-Dinitrotoluene (606-20-2)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
29B. Di-N-OctylPhthalate (117-84-0)	X		X	<0.004	<0.41					1	mg/L	lb/day	<0.004	<2.13	1
30B. 1,2-Diphenyl-hydrazine (as Azobenzene) (122-66-7)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
31B. Fluoranthene (206-44-0)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
32B. Fluorene (86-73-7)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
33B. Hexachlorobenzene (118-74-1)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
34B. Hexachlorobutadiene (87-68-3)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
35B. Hexachlorocyclo-pentadiene (77-47-4)	X		X	<0.001	<0.10					1	mg/L	lb/day	<0.001	<0.53	1
36B. Hexachloroethane (67-72-1)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
37B. Indeno (1,2,3-cd) Pyrene (193-39-5)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
38B. Isophorone (78-59-1)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
39B. Naphthalene (91-20-3)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
40B. Nitrobenzene (98-95-3)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
41B. N-Nitrosodimethylamine (62-75-9)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
42B. N-Nitrosodi-N-Propylamine (621-64-7)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1

CONTINUED FROM FRONT

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK "X"			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Test- ing Required	b. Bel- ieved Present	b. Bel- ieved Absent	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVRG. VALUE (if available)		d. NO. OF ANAL- YSES	a. CONCEN- TRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANAL- YSES
				(1) CONCEN- TRATION	(2) MASS	(1) CONCEN- TRATION	(2) MASS	(1) CONCEN- TRATION	(2) MASS				(1) CONCEN- TRATION	(2) MASS	
GC/MS FRACTION — BASE/NEUTRAL COMPOUNDS (continued)															
43B. N-Nitro- sodiphenylamine (86-30-6)	X		X	<0.003	<0.31					1	mg/L	lb/day	<0.003	<1.60	1
44B. Phenanthrene (85-01-8)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
45B. Pyrene (129-00-0)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
46B. 1,2,4-Tri- chlorobenzene (120-82-1)	X		X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1
GC/MS FRACTION — PESTICIDES															
1P. Aldrin (309-00-2)			X	<0.00002	<0.002					1	mg/L	lb/day	<0.00002	<0.01	1
2P. α -BHC (319-84-6)			X	<0.00002	<0.002					1	mg/L	lb/day	<0.00002	<0.01	1
3P. β -BHC (319-85-7)			X	<0.00002	<0.002					1	mg/L	lb/day	<0.00002	<0.01	1
4P. γ -BHC (58-89-9)			X	<0.00002	<0.002					1	mg/L	lb/day	<0.00002	<0.01	1
5P. δ -BHC (319-86-8)			X	<0.000007	<0.0007					1	mg/L	lb/day	<0.000007	<0.004	1
6P. Chlordane (57-74-9)			X	<0.0005	<0.05					1	mg/L	lb/day	<0.0005	<0.27	1
7P. 4,4'-DDT (50-29-3)			X	<0.000008	<0.0008					1	mg/L	lb/day	<0.000008	<0.004	1
8P. 4,4'-DDE (72-55-9)			X	<0.00002	<0.002					1	mg/L	lb/day	<0.00002	<0.01	1
9P. 4,4'-DDD (72-54-8)			X	<0.000004	<0.0004					1	mg/L	lb/day	<0.000004	<0.002	1
10P. Dieldrin (60-57-1)			X	<0.000007	<0.0007					1	mg/L	lb/day	<0.000007	<0.004	1
11P. α -Endosulfan (115-29-7)			X	<0.00001	<0.001					1	mg/L	lb/day	<0.00001	<0.005	1
12P. β -Endosulfan (115-29-7)			X	<0.000004	<0.0004					1	mg/L	lb/day	<0.000004	<0.002	1
13P. Endosulfan Sulfate (1031-07-8)			X	<0.00002	<0.002					1	mg/L	lb/day	<0.00002	<0.01	1
14P. Endrin (72-20-8)			X	<0.00002	<0.002					1	mg/L	lb/day	<0.00002	<0.01	1
15P. Endrin Aldehyde (7421-93-4)			X	<0.00002	<0.002					1	mg/L	lb/day	<0.00002	<0.01	1
16P. Heptachlor (76-44-8)			X	<0.00002	<0.002					1	mg/L	lb/day	<0.00002	<0.01	1

CONTINUED FROM PAGE V-8

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

OUTFALL NUMBER

02

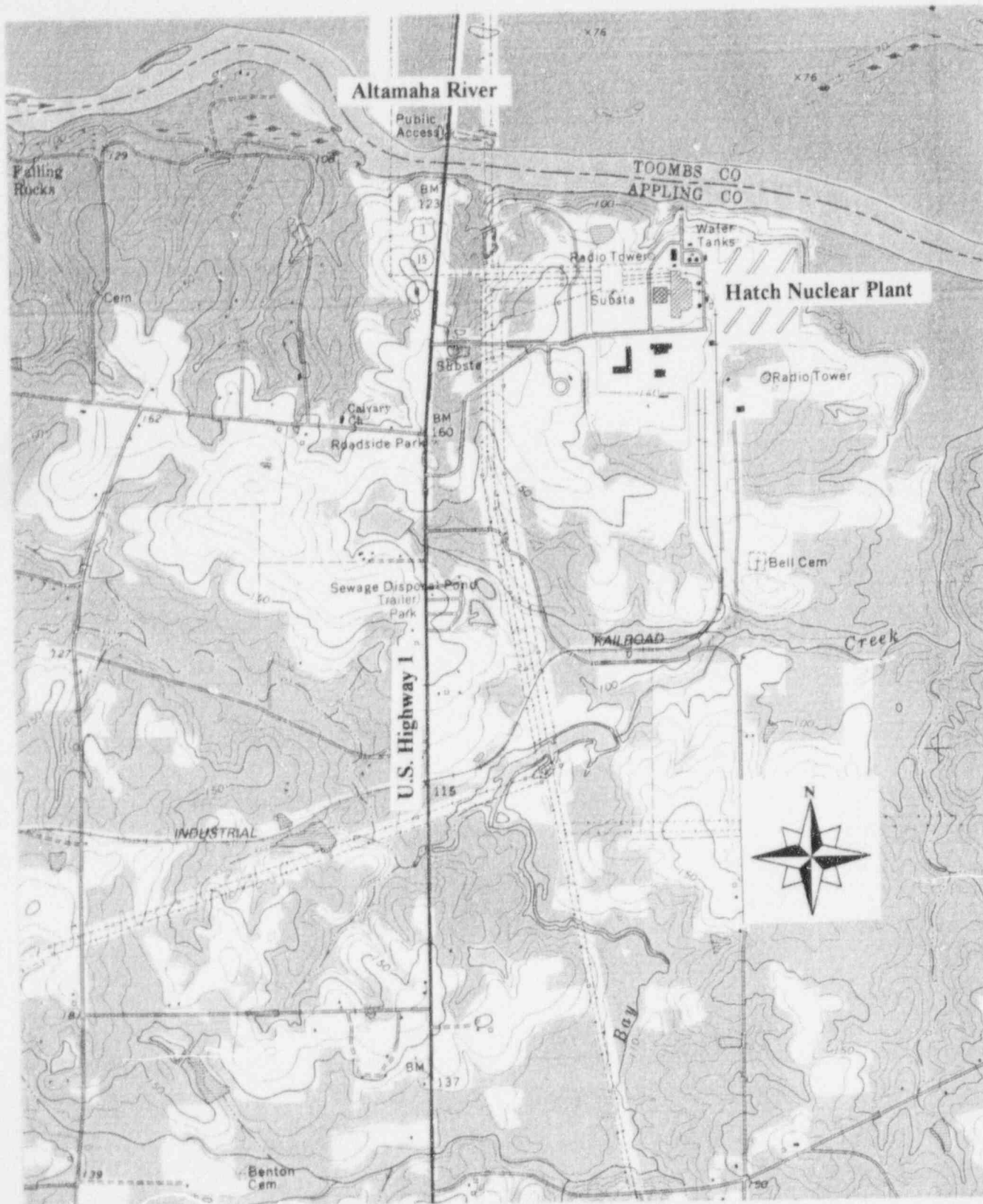
Form Approved.

OMB No. 2040-0086

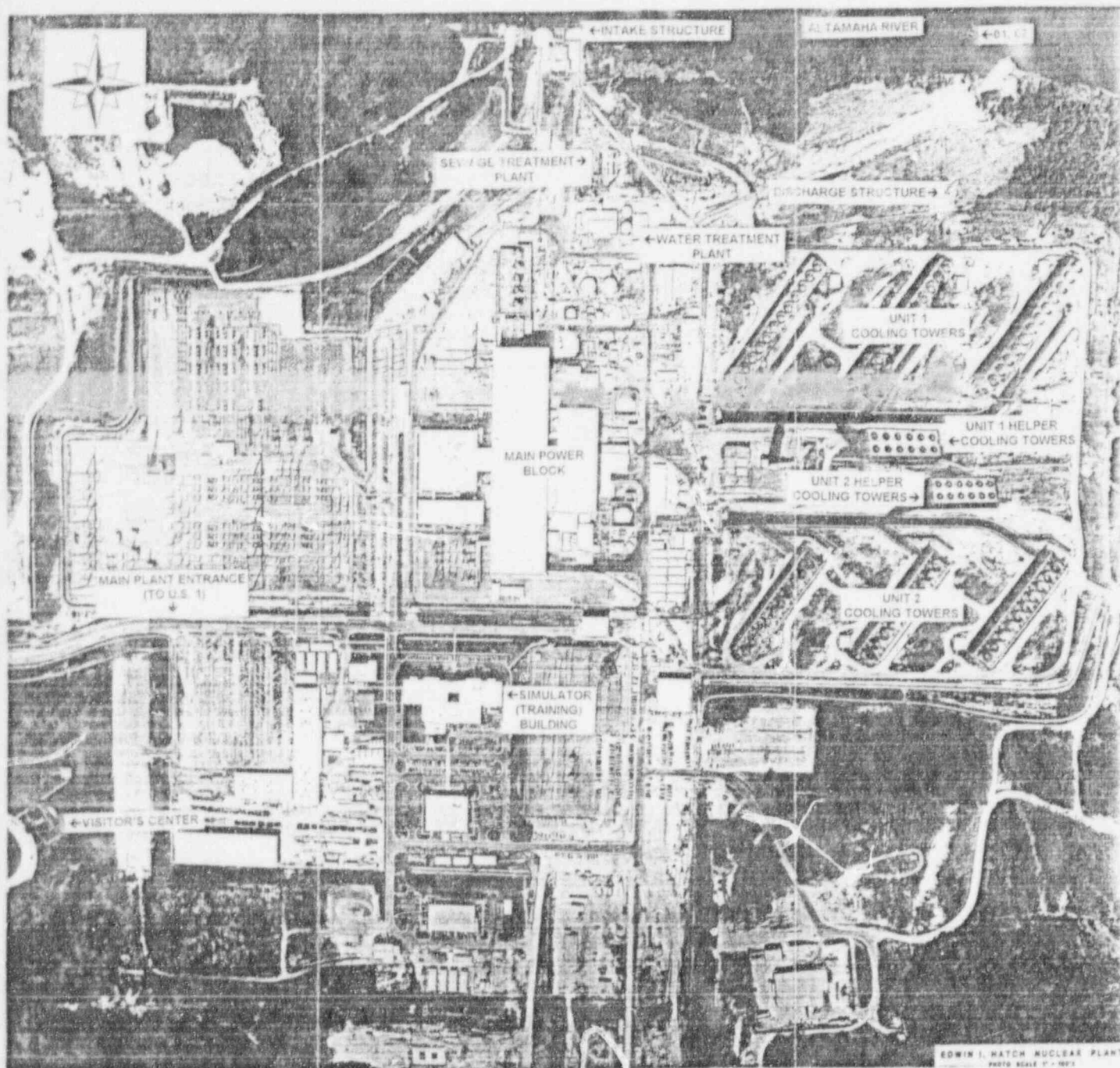
Approval expires 7-31-88

1. POLLUTANT AND CAS NUMBER (if available)	2. MARK 'X'			3. EFFLUENT						4. UNITS		5. INTAKE (optional)			
	a. Test- ing	b. Re- sulted	b. Re- sulted	a. MAXIMUM DAILY VALUE		b. MAXIMUM 30 DAY VALUE (if available)		c. LONG TERM AVG. VALUE (if available)		d. NO. OF ANAL-	a. CONCENTRATION	b. MASS	a. LONG TERM AVERAGE VALUE		b. NO. OF ANAL- YES
	Required	Present	Absent	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	(1) CONCENTRATION	(2) MASS	YES			(1) CONCENTRATION	(2) MASS	
CCMS FRACTION — PESTICIDES (continued)															
17P. Heptachlor Epoxide (1024-57-3)			X	<0.00002	<0.002					1	mg/L	lb/day	<0.00002	<0.01	1
18P. PCB-1242 (53469-21-9)			X	<0.0005	<0.005					1	mg/L	lb/day	<0.0005	<0.27	1
19P. PCB-1254 (11097-69-1)			X	<0.0005	<0.005					1	mg/L	lb/day	<0.0005	<0.27	1
20P. PCB-1221 (11104-28-2)			X	<0.0005	<0.005					1	mg/L	lb/day	<0.0005	<0.27	1
21P. PCB-1232 (11141-16-5)			X	<0.0005	<0.005					1	mg/L	lb/day	<0.0005	<0.27	1
22P. PCB-1248 (12672-29-5)			X	<0.0005	<0.005					1	mg/L	lb/day	<0.0005	<0.27	1
23P. PCB-1260 (11096-82-5)			X	<0.0005	<0.005					1	mg/L	lb/day	<0.0005	<0.27	1
24P. PCB-1016 (12674-11-2)			X	<0.0005	<0.005					1	mg/L	lb/day	<0.0005	<0.27	1
25P. Toxaphene (8001-35-2)			X	<0.002	<0.21					1	mg/L	lb/day	<0.002	<1.06	1

**ENCLOSURE 2
TO ENV-97-055**



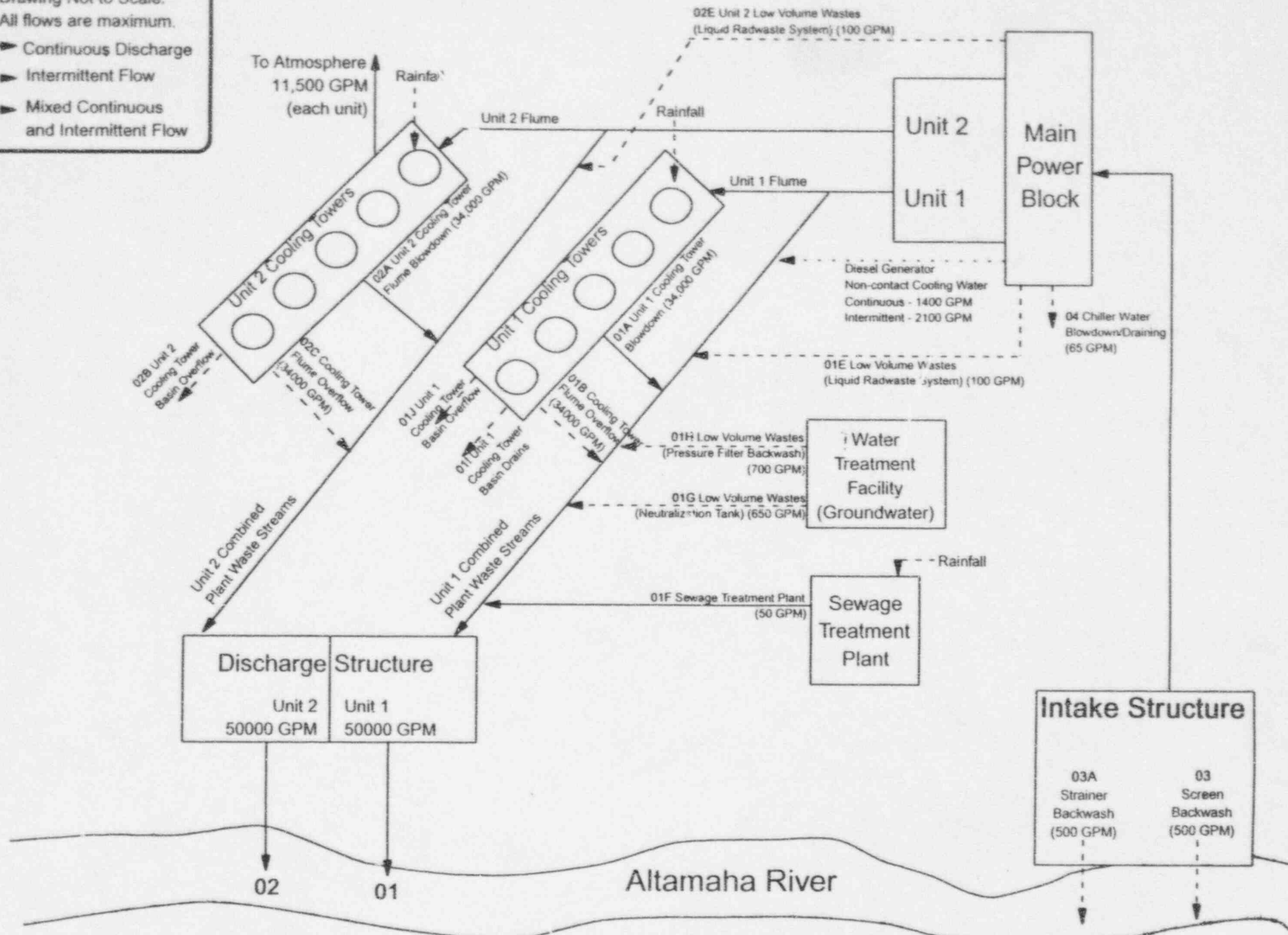
EDWIN I. HATCH NUCLEAR PLANT
GENERAL TOPOGRAPHIC MAP



EDWIN I. HATCH NUCLEAR PLANT
LOCATION MAP

Legend

- * Drawing Not to Scale.
- * All flows are maximum.
- Continuous Discharge
- - - Intermittent Flow
- . - Mixed Continuous and Intermittent Flow



Process Flow Diagram
Hatch Nuclear Plant

**ENCLOSURE 3
TO ENV-97-055**

ENCLOSURE 3

SPECIFIC REVISIONS AND UPDATES REQUESTED FOR PERMIT RENEWAL

Edwin I. Hatch Nuclear Plant

The EPD approved the transfer of the current NPDES permit to Southern Nuclear Operating Company from Georgia Power Company in correspondence dated April 15, 1997. Southern Nuclear and Georgia Power Company are both subsidiaries of the Southern Company. The U.S. Nuclear Regulatory Commission had previously reviewed and approved a request to transfer the operating licenses for Plant Hatch to Southern Nuclear, effective March 22, 1997. The address and general information for Southern Nuclear as it should appear on the permit are provided in Form 1.

In an effort to make the permit easier to use, Southern Nuclear requests that the Part I permit pages be renumbered in the numerical and/or operational sequence shown below. This renumbering of pages does not involve a change in outfall serial numbers, but simply places the outfall pages in a more logical sequence.

Discharge Point Serial Number and Description	Numerical Sequence
01 and 02, Combined Plant Waste Stream	Page 2 of ____
01A and 02A, Cooling Tower Blowdown	Page 3 of ____
01B and 02C, Cooling Tower Flume Overflows	Page 4 of ____
01J and 02B, Cooling Tower Basin Overflows, and 01I, Unit 1 Cooling Tower Basin Drains	Page 5 of ____
01E and 02E, Low Volume Wastes (Liquid Radwaste Systems)	Page 6 of ____
01G, Low Volume Waste (Neutralization Tank)	Page 7 of ____
01H, Low Volume Waste (Pressure Filter Backwash)	Page 8 of ____
03 and 03A, Intake Screen and Strainer Backwash	Page 9 of ____
04, Blowdown and Draining of Water from the Chiller Systems*	Page 10 of ____

* Updated outfall description; see Form 2C.

For outfall serial number(s) 01A and 02A - Cooling Tower Blowdown from Units 1 and 2, page 4 of 25, chromium and zinc are no longer added to the systems. Southern Nuclear requests that sampling for these metals be reduced to once per year. A note should be added to the page that reads:

"Chromium and zinc are no longer added to these systems. Monitoring frequency shall be 1/year if the addition of cooling tower maintenance chemicals containing these compounds is not initiated by the permittee."

Page 5 of 25 in the current permit includes five outfall serial numbers. Three of these outfalls are utilized on an intermittent basis and two are utilized frequently. To resolve confusion and misunderstanding about these outfalls, Southern Nuclear recommends that this page be separated into two pages. Outfall serial numbers 01B and 02C are utilized frequently and should be on one page. Outfall serial numbers 01J, 02B, and 01I, which are utilized intermittently, should be on a separate page. Suggested language for these pages is provided as Enclosure 4.

Southern Nuclear recommends that the first note on page 6 of 25 of the current permit be rephrased to read as shown below. (Disodium molybdate use and discharge is discussed in Table 2C-1, page 3 of 3.)

"The permittee may drain chiller water containing sodium nitrite, disodium molybdate, and/or other approved corrosion inhibitors through this discharge. (See Part III.11.) Each draining event shall be documented and records retained and shall include the initial corrosion inhibitor concentration, the amount drained, the available dilution flow rate, and the estimated corrosion inhibitor concentration at the applicable Combined Plant Waste Stream discharge (OSN 01 and/or 02). Alternate corrosion inhibitors may be used in accordance with applicable permit requirements."

Southern Nuclear requests the following addition to the provisions in Part III.B of the permit:

"The permittee is authorized to discharge stormwater from the outfalls identified in Part I.A, of the permit provided that these discharges do not cause violations of State water quality standards in the receiving streams."

For Part III.B.2, Southern Nuclear requests the following addition to the wording:

"Any metal cleaning wastes generated will be contained for further treatment or disposal in a manner to permit compliance at time of discharge with requirements listed below or disposed in a manner approved by the Division. This applies..."

For Part III.B.15, Southern Nuclear requests the following modification:

"Upon approval of the Director, the permittee shall, on a case-by-case basis, be able to utilize alternative analytical methods, conversion factors, methodology, procedures, or new technologies, to ensure that the biomonitoring and toxicity reduction requirements of Part III.C and the testing/reporting requirements of the permit are adequately addressed."

For Part III.18, the requirement should be reworded to allow offsite disposal and/or onsite disposal per the approved Sludge Management Plan. The following wording is recommended:

"This permit authorizes onsite disposal of sludge from the domestic wastewater treatment plant in accordance with the conditions and requirements specified in the EPD-approved Sludge Management Plan. Sludge may also be disposed offsite at approved facilities in accordance with applicable permit requirements."

For Part III.B.19, the following wording should be added for the reporting of parameters that do not have minimum detection limits (MDLs):

"If the results for a given sample are such that a parameter is not detected at or above the method detection limit or reporting limit, a value of zero will be reported for that sample and the method detection limit or reporting limit will also be reported. Such sample shall be deemed to be in compliance with the permit limit."

**ENCLOSURE 4
TO ENV-97-055**

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

4. During the period beginning effective date and lasting through October 31, 2002, the permittee is authorized to discharge from outfall(s) serial number(s) 01B and 02C - Units 1 and 2 Cooling Tower Flume Overflows to Storm Drains.

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

Cooling water may be discharged from the above outfalls on a frequent basis. The same discharge limitations apply as for outfalls 01A and 02A. If these outfalls are used in lieu of outfalls 01A and 02A, the permittee is required to monitor at the overflow flume or discharge line, as appropriate, utilizing the same measurement frequency and sample type as specified for outfalls 01A and 02A.

There shall be no discharge of floating solids or visible foam in other than trace amounts for discharges direct to the river.

See Part III, Special Requirements, Item 7.

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

5. During the period beginning effective date and lasting through October 31, 2002, the permittee is authorized to discharge from outfall(s) serial number(s) 01J and 02B - Units 1 and 2 Cooling Tower Basin Overflows to Storm Drains and 01I - Unit 1 Cooling Tower Basin Drains.

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

Cooling water may be discharged from the above outfalls on an intermittent basis. The same discharge limitations apply as for outfalls 01A and 02A. If these outfalls are used in lieu of outfalls 01A and 02A, the permittee is required to monitor at the overflow flume or discharge line, as appropriate, utilizing the same measurement frequency and sample type as specified for outfalls 01A and 02A.

There shall be no discharge of floating solids or visible foam in other than trace amounts for discharges direct to the river.

See Part III, Special Requirements, Item 7.