

DISCHARGE MONITORING REPORT
 TENNESSEE VALLEY AUTHORITY
 BROWNS FERRY NUCLEAR PLANT

DSN 101 - Diffuser Discharge
 Structure

Month January 19 86

NPDES # AL0022080

PARAM	FLOW	pH	Ambient River Temperature	Downstream River Temp.	Downstream River Temp	Downstream River Temp	Temperature Rise
AVE	-	min 6.0	--	24-hr avg Max	6-hr avg Max	Inst. Hrly Max	24-hr avg Max
MAX	-	9.0	--	90.0	92.0	93.0	10.0
UNITS	MGD	s.u.	--	°F	°F	°F	°F
FREQ	Cont.	1/wk	2/, 6/ Continuous	3/, 6/ Continuous	3/, 6/ Continuous	3/, 6/ Continuous	4/, 6/ Continuous
1	950.4		42.7	42.1	0	42.3	-0.1
2	950.4		42.2	42.0	0	42.1	-0.1
3	950.4		43.3	42.4	0	43.0	-0.3
4	950.4		43.8	43.1	0	43.4	-0.5
5	950.4		43.8	43.1	0	42.9	-0.2
6	950.4		42.5	42.2	0	41.7	-0.2
7	950.4	7.8	42.1	41.8	0	42.1	-0.1
8	950.4		42.0	41.8	0	41.6	0.1
9	950.4		40.6	40.7	0	40.8	0.3
10	950.4		41.5	41.3	0	42.1	0.2
11	950.4		41.9	41.6	0	42.0	-0.1
12	950.4		42.4	42.0	0	42.5	-0.2
13	950.4		42.6	42.2	0	42.3	-0.3
14	950.4	8.3	42.5	42.0	0	42.1	-0.2
15	950.4		42.2	41.8	0	42.0	-0.2
16	950.4		42.7	42.1	0	42.6	-0.4
17	950.4		43.3	42.5	0	43.2	-0.5
18	950.4		44.0	43.1	0	43.5	-0.8
19	950.4		44.7	43.6	0	43.7	-0.7
20	950.4		44.7	43.9	0	44.6	-0.3
21	950.4	8.1	44.8	44.2	0	44.4	0
22	950.4		46.1	45.0	0	45.6	-0.6
23	950.4		46.1	45.2	0	45.3	-0.2
24	950.4		45.1	44.7	0	44.2	-0.2
25	950.4		44.8	44.1	0	44.4	-0.1
26	950.4		44.2	44.0	0	43.6	0
27	950.4		43.3	43.2	0	42.3	0.8
28	950.4	8.2	39.0	39.0	0	40.8	0.4
29	950.4		40.7	40.6	0	41.7	0.5
30	950.4		41.1	41.5	0	41.7	0.6
31	950.4		41.1	41.5	0	41.9	0.5
MAX	950.4	8.3	46.1	45.2	0	45.6	0.8
AVG	950.4	7.8*	43.0	42.5	0	42.8	-0.1

* Minimum pH value

I certify under penalty of law that this document and all attachments were prepared under the direction of supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.

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Signature of Responsible Official Martin E. Rivers Date: FEB 25 1986

IE25
0/1

8603050544 860131
PDR ADDCK 05000259
PDR

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DISCHARGE MONITORING REPORT
TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT

DSN 102 - Sedimentation Pond
MONTH January 19 86

NPDES # AL0022080

PARAM	FLOW	pH	O&G	TSS	
AVG	--	6.0	15	30	
MAX	--	9.0	20	100	
UNITS	MGD	s.u.	mg/l	mg/l	
FREQ	1/release	1/release	1/release	2/release	
1					
2					
3					
4					
5					
6					
7					
8					
9	Start of		<5.0	4.1	
10	Release				
11	Jan. 9				
12					
13					
14					
15					
16					
17					
18	End of (1)	7.2		6.4	(1) Total volume released from
19	Release				Jan. 9-Jan. 18 was 2.333
20	Jan. 18				MG. Average daily release
21					volume was 0.248 MGD.
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
MAX	2.333 (2)			6.4	(2) Total MG released per month
AVG	0.248 (3)			5.2	(3) Average daily release
					volume MGD 10 day period

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ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DISCHARGE MONITORING REPORT

TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT

DSN 103 - Units 1,2,3 Turbine
Bldg. Station Sumps
MONTH January 19 86

NPDES # AL0022080

PARAM	FLOW	O&G	TSS
AVG		15	30
MAX		20	100
UNITS	MGD	mg/L	mg/L
FREQ	1/wk	1/wk	1/wk
1			
2	0.118286	<5.0	7.1
3			
4			
5			
6			
7			
8			
9	0.119952	11.9	9.6
10			
11			
12			
13			
14			
15			
16	0.102240	11.0	3.3
17			
18			
19			
20			
21			
22			
23	0.096912	<5.0	5.3
24			
25			
26			
27			
28			
29			
30	0.02304	<5.0	13.2
31			
MAX	0.119952	11.9	13.2
AVG	0.092086	<7.6	7.7

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ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DISCHARGE MONITORING REPORT
TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT

DSN 104-Liquid Radwaste

MONTH January 19 86

NPDES # AL0022080

PARAM	FLOW	O&G	*TSS	LDT	LDT		
				TSS	O&G	Copper	Iron
AVG		15	30	30	15		
MAX		20	100	100	20	1.0	1.0
UNITS	MGD	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
FREQ	1/batch	2/wk	2/wk	1/batch	1/batch		
1	No Release						
2	0.005188	<5.0	15.0	15.0	<5.0		
3	No Release						
4	0.040098			19.3	13.8		
5	0.007535						
6	0.074859	5.6	<1.0				
7	0.029956						
8	0.010005			3.0	<5.0		
9	0.033669	<5.0	<1.0				
10	0.031185						
11	0.036139			20.0	7.2		
12	0.117065			11.9	6.8		
13	0.033669	<5.0	<1.0				
14	0.034099						
15	0.010993			11.1	14.0		
16	0.033269	<5.0	<1.0				
17	0.033269						
18	0.039873						
19	0.083139			78.4	<5.0		
20	0.061422	7.1	<1.0				
21	0.073017						
22	0.037200			16.4	16.6		
23	No Release	(1) <5.0	8.8				
24	0.108702						
25	0.033412						
26	0.033412						
27	0.031296	<5.0	3.7				
28	No Release						
29	0.082017			12.0	14.3		
30	0.033566	<5.0	2.0				
31	0.031296						
MAX	0.117065	7.1	15.0	78.4	16.6		
AVG	0.038044	<5.3	<3.8	20.8	<9.7		

(1) No Release was made on 1/23/86, however the composite sample was analyzed 1/23/86 and the actual release for the composite was made 1/24/86.

*Composite Samples

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ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DISCHARGE MONITORING REPORT
TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT

DSN 105-Residual Heat Removal
Service Water
MONTH January 19 86

NPDES # AL 0022080

PARAM	FLOW	TEMP
AVG		
MAX		
UNITS	MG/D	oF
FREQ	1/wk	1/wk
1	0	166
2		
3		
4		
5		
6		
7		
8	0	167.3
9		
10		
11		
12		
13		
14		
15	*	
16		
17		
18		
19		
20		
21		
22	0.000020	144
23		
24		
25		
26		
27		
28		
29		
30	0	140
31		
MAX	0.000020	167.3
AVG	0.000005	154.3

* Data not available.

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ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT

DSN 106-Condenser Cooling Water
Pump Station Sump

MONTH: January 19 86

NPDES # AL 0022080

PARAM	FLOW	O&G	TSS
AVG		15	30
MAX		20	100
UNITS	MGD	mg/L	mg/L
FREQ	1/wk	1/wk	1/wk
1			
2			
3	No Discharge		
4			
5			
6			
7			
8			
9			
10	No Discharge *		
11			
12			
13			
14			
15			
16			
17	0.007889	7.5	7.4
18			
19			
20			
21			
22			
23			
24	No Discharge *		
25			
26			
27			
28			
29			
30			
31	0.003168	<5.0	8.8
MAX	0.007889	7.5	8.8
AVG	0.002211	<5.0	3.2

*Maintenance being performed

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ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT

DSN 107-Unit 3 Control Bldg.

Drain

MONTH January 19 86

NPDES # AL 0022080

PARAM	FLOW	O&G	TSS
AVG		15	30
MAX		20	100
UNITS	MGD	mg/l	mg/l
FREQ	1/wk	1/wk	1/wk
1			
2			
3			
4			
5			
6			
7	0.001440	<5.0	1.6
8			
9			
10			
11			
12			
13			
14	No Flow		
15			
16			
17	No Flow		
18			
19			
20			
21	No Flow		
22			
23			
24	No Flow		
25			
26			
27			
28	0.000502	7.3	3.5
29			
30			
31			
MAX	0.001440	7.3	3.5
AVG	0.000324	<5.0	2.6

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BROWNS FERRY NUCLEAR PLANT

DSN 108 Unit 2 Diesel Bldg.

Sump Units 1 & 2

MONTH January 19 86

NPDES # AL 0022080

PARAM	FLOW	O&G	TSS
AVG		15	30
MAX		20	100
UNITS	MGD	mg/l	mg/l
FREQ	1/wk	1/wk	1/wk
1	No Release		
2			
3			
4			
5			
6			
7			
8	No Release		
9			
10			
11			
12			
13			
14			
15	No Release		
16			
17			
18			
19			
20			
21			
22	No Release		
23			
24			
25			
26			
27			
28			
29	No Release		
30			
31			
MAX	No Release		
AVG	No Release		

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DISCHARGE MONITORING REPORT
TENNESSEE VALLEY AUTHORITY
BROWNS FERRY NUCLEAR PLANT

BSN 109 Unit 3 Diesel Bldg Sump
MONTH January 19 86

NPDES # AL 0022080

PARAM	FLOW	O&G	TSS
AVG		15	30
MAX		20	100
UNITS	MGD	mg/l	mg/l
FREQ	1/wk	1/wk	1/wk
1	No Release		
2			
3			
4			
5			
6			
7			
8	No Release		
9			
10			
11			
12			
13			
14			
15	No Release		
16			
17			
18			
19			
20			
21			
22	No Release		
23			
24			
25			
26			
27			
28			
29	No Release		
30			
31			
MAX	No Release		
AVG	No Release		

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ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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BROWNS FERRY NUCLEAR PLANT

DSN 110 Unit 1&2 Office Bldg. Drain

MONTH January 19 86

NPDES # AL 0022080

PARAM	FLOW	O&G	TSS
AVG		15	30
MAX		20	100
UNITS	MGD	mg/l	mg/l
FREQ	1/wk	1/wk	1/wk
1			
2			
3			
4			
5			
6			
7	0.000270	11.5	14.6
8			
9			
10			
11			
12			
13			
14	0.000408	<5.0	18.3
15			
16			
17			
18			
19			
20			
21	0.000196	<5.0	10.1
22			
23			
24			
25			
26			
27			
28	0.000351	6.5	10.5
29			
30			
31			
MAX	0.000408	11.5	18.3
AVG	0.000306	<7.0	13.4

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ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DISCHARGE MONITORING REPORT
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BROWNS FERRY NUCLEAR PLANT

DSN 111 Sewage Treatment Lagoon
MONTH January 19 86

NPDES # AL 0022080

PARAM	FLOW	TSS	BOD5	
AVG		90	30	
MAX			45	
UNITS	MGD	mg/l	mg/l	
FREQ	5/wk	1/wk	1/wk	
1	0.031248			
2	0.031248			
3	0.031248	10.8	16.3	
4				
5				
6	0.024048			
7	0.024048			
8	0.024048			
9	0.024048			
10	0.024048	11.5	14.8	
11				
12				
13	0.024048	10.3		
14	0.024048			
15	*		11.2	
16	0.031248			
17	0.039600			
18				
19				
20	0.031248	13.8	18.7	
21	0.031248			
22	0.039600			
23	0.031248			
24	0.049248			
25				
26				
27	0.049248	48.8	*	Sample collected but data
28	0.049248			invalid because of
29	0.049248			analytical error (super-
30	0.049248			saturated solution DO 9.72)
31	0.049248			
MAX	0.049248	48.8	18.7	
AVG	0.034625	19.0	15.3	

*Data not available.

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