

Tennessee Valley Authority, Post Office Box 2000, Soddy-Daisy, Tennessee 37384-2000

April 10, 2003

State of Tennessee
Department of Environment and Conservation
Division of Water Pollution Control
Enforcement & Compliance Section
6th Floor, L & C Annex
401 Church Street
Nashville, Tennessee 37243-1534

Attention: Mr. Chip Hannah

Dear Mr. Hannah:

TENNESSEE VALLEY AUTHORITY - DISCHARGE MONITORING REPORT FOR SEQUOYAH NUCLEAR PLANT

Please find enclosed the Discharge Monitoring Report (DMR) of March 2003 for Sequoyah. Please contact me at (423) 843-6700 if you have any questions or comments.

Sincerely,

Michael G. Beavers

M. Same

Acting Environmental Supervisor

Signatory Authority for

Richard T. Purcell

Site Vice President

Sequoyah Nuclear Plant

Enclosure

cc (Enclosure):

Chattanooga Environmental Assistance Center Division of Water Pollution Control State Office Building, Suite 550 540 McCallie Avenue Chattanooga, Tennessee 37402-2013

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



PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different) Name TVA - SEQUOYAH NUCLEAR PLANT	NATIONAL POLLUTANT DISCHARGE DISCHARGE MONITO		MAJOR (SUBR 01)	Form Approved OMB No 2040-0004
Address P O BOX 2000 (INTEROFFICE SB-2A)	TN0026450	101 G	F - FINAL	
SODDY - DAISY TN 37384	PERMIT NUMBER	DISCHARGE NUMBER	DIFFUSER DISCHARGE	
Facility TVA - SEQUOYAH NUCLEAR PLANT Location HAMILTON COUNTY		RING_PERIOD	EFFLUENT	
ATTN. Michael G. Beavers	From 03 03 01	To 03 03 31	NO DISCHARGE	***
			NOTE Read instructions before	
PARAMETER	QUANTITY OR LOADING	QUALITY OR CO	NCENTRATION	NO. FREQUENCY SAM

PARAMETER		01141	TITY OF LOADING			01111177000000		mistractions belor			· · · · · · · · · · · · · · · · · · ·
PARAMETER		. QUAN	ITITY OR LOADING			QUALITY OR CONC	ENTRATION		NO. EX	FREQUENCY OF	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS		ANALYSIS	
TEMPERATURE, WATER DEG. CENTIGRADE	SAMPLE MEASUREMENT	******	*****	**	*****	*****	14.9	04	0	31 / 31	MODELD
00010 Z 0 0 INSTREAM MONITORING	PERMIT. REQUIREMENT	*******	*******	****	****	*******	30.5 DAILY MX	DEG. C.		SEÉ.	CK REO
TEMPERATURE, WATER DEG. CENTIGRADE	SAMPLE MEASUREMENT	*****	****	**	*****	*****	27.9	04	0		RCORDR
00010 1 0 0 EFFLUENT GROSS VALUE	PERMIT: REQUIREMENT			****			REPORT DAILY MX	DEG. C.		SEE	CK REQ
РН	SAMPLE MEASUREMENT	******	*****	**	7.5	****	7.6	12	0	8/31	GRAB
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT		110000000000000000000000000000000000000	***	6.0 MINIMUM		9:0 MAXIMUM	su		WEEKLY	- GRAB
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	*****	******	**	******	8	10	19	0	4/31	GRAB
00530 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			***		30 MO AVG	- 100 DAILY MX	MG/L		WEEKLY	GRAB
OIL AND GREASE	SAMPLE MEASUREMENT	******	******	**	******	<5	<5	19	0	4/31	GRAB
00556 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			***		ar, 15 ≟MOʻAVG	20 DAILY MX	MG/L		WEEKLY.	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	******	1626	03	*****	*****	****	**	0	31 / 31	RCORDR
50050 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT		REPORT DAILY MX	MGD		******		***		CONTIN	RCORDR
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	******	******	**	*****	<0.008	0.028	19	0	37 / 31	GRAB
50060 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*******		****		0.036	0.058 INST MAX	MG/L		WEEK-	CALCTD

1		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	u R	TE	LEPHONE		DATE	
-	Richard T. Purcell	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	M. Dwan					
	Sita Vica Procident	information, the information submitted is , to the best of my knowledge and belief, true,	/ Environmental Supervisor	423	843-6700	03	04	14
		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	SIGNATURE OF PRINCIPAL EXECUTIVE					<u> </u>
	TYPED OR PRINTED		OFFICER OR AUTHORIZED AGENT	AREA CODE	NUMBER	YEAR	МО	DAY
느	0101F1170 1115 FVD1 111171011 07 111111			CODE		<u> </u>		1

No closed mode operation. The following injections occured: 1. PCL-222 (max. calc. conc was 0 029mg/L--limit 0.100mg/L) 2. CL-363 (max. calc. conc was 0.017mg/L-limit 0.100mg/L) 3 PCL-222/PCL-401 (max. calc. conc was 0 021mg/L-limit 0.100mg/L)

ERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different) Arme			DISCHARGE MONITORING REPORT (DMR)					SUBR 01) Form Approx (SUBR 01) OMB No. 20					,	
Address P O BOX 2000 (INTEROFFICE SB-2A)			TNO	026450		·	101 G	F - FINAL						
SODDY - DAISY TN 37384		- -		T NUMBER	DIS	CHAR	GE NUMBER	DIFFUSER DISCH	IARGE					
Facility TVA - SEQUOYAH NUCLEAR I	PLANT				ITORING_PI			EFFLUENT						
				MO DA	Y [Y	YEAR	MO DAY	*** NO DISCHA	RGE	***				
ATTN ⁻ Michael G. Beavers			From 03	03 01	1 To [structions before	e comple	mpleting this form			
PARAMETER		QUAN	ITITY OR LOADING	-		QUALITY OR CONC		NCENTRATION		NO. EX	FREQUENC	1 т	MPLE	
		AVERAGE	MAXIMUM	UNITS	MINIMU	JM	AVERAGE	MAXIMUM	UNITS		ANALYSIS	·]		
TEMPERATURE - C, RATE OF CHANGE	SAMPLE MEASUREMENT	******	*****	**	*****	**	******	0.3	62	0	31 / 31	CA	LCTD	
32234 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****		****	*****			2.0	DEG C		CONTIN		LCTD	
TEMP. DIFF. BETWEEN SAMP. & JPSTRM DEG.C	SAMPLE MEASUREMENT	*****	*****	**	*****	**	*****	2.0	04	0	31 / 31		LCTD	
00016 1 W 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			****.	*****		******	5.0	DEG. C.		CONTIN	47 1 10	LCTD	
	SAMPLE MEASUREMENT		Section 18		395 77 5 77	3 24	and the second second	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		his vist dam	<u> </u>	4 55 Pet	7 3 1 5 2 July	
	PERMIT REQUIREMENT			1										
	SAMPLE MEASUREMENT		THE PARTY OF THE P		7,7,933	C necessary	A STATE OF STATE OF THE	291 3913	1	,		<u> Pick</u>	7.5	
	PERMIT REQUIREMENT													
	SAMPLE MEASUREMENT				1000					Section 40	THE STATE OF STATE	1953	bud S. r.	
	PERMIT REQUIREMENT													
BORON, TOTAL	SAMPLE MEASUREMENT	*****	*****	**	<0.2		<0.2	<0.2	19	0	1/31		RAB	
01022 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			***	REPO	RT	REPORT	REPORT	MG/L		ONCE/	120	RAB	
	SAMPLE MEASUREMENT	2.5	A STATE OF THE STA					\$ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	***	8-87.5	2 T. A	2 (424)	******	
	PERMIT PERMIT								15					
NAME/TITLE PRINCIPAL EXECUTIVE OF		malty of law that this docu	ument and all attachments	were prepared	d under my				TELEPHO	NE		DATE		
Richard T. Purcell	properly gather a persons who man	and evaluate the information age the system, or those	n a system designed to as on submitted. Based on m persons directly respons	ny inquiry of the	e person or	M.,	Successive Environmental's	Supervisor						
Site Vice President	accurate, and cor	mplete. I am aware that th	to the best of my knowled here are significant penalti a and imprisonment for knowled	ies for submitting	no false	SIGNA		IPAL EXECUTIVE		-6700	03	04	14	
TAREN ON NOUTER				the state of the s		Url	INVENTAGE MUTAL	and the matter	MINTER 1 MILE	2 /4 H H		4817	. TIAV I	

CCW data for March 2003 is attached. Explaniation of TRC grab samples due to no units discharging flow from the CCW is attached.

TYPED OR PRINTED

YEAR

МО

DAY

AREA

CODE

NUMBER

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

CCW Data for March 2003

	CCW CHANNEL	
DATE	EXTRACTABLE PETROLEUM HYDROCARBONS (mg/L)	COMMENTS
larch 7, 2003	< 0.5	
		,
	CCW TRENCH DISCHARGE	
D.4.22	EXTRACTABLE PETROLEUM HYDROCARBONS	COMMENTS
DATE	(mg/L)	<u> </u>

March 26, 2003

Plant Status:

Unit 1 - Scheduled Outage; Mode 6

Unit 2 – Forced Outage; Mode 3

Chemical Treatment of Systems for Calculated Total Residual Chlorine (TRC)

Plant System	Chemical	Chemical	Pumps in	System Flow
	Treatment	Concentration	Service	•
Raw Cooling Water (RCW)	None	None	2	14400 gpm
Essential Raw Cooling Water (ERCW)	None	None	4	Train A: 15300 gpm Train B: 15000 gpm
Condenser Cooling Water (CCW)	None	None	3	540000 gpm
High Pressure Fire Protection (HPFP)	Chlorinated by Hixson Utility (potable water)	0.78 mg/L TRC	leakage	25 gpm*

* This is system leakage and not a constant discharge but is used in the diffuser discharge calculated TRC value.

TRC Calculation	Date/Time	TRC Value	Diffuser Flow (Outfall 101)	River Flow
Daily calculated sample before CCW Pumps are shutdown	03/26/03 1300	< 0.008 mg/L	1434 cfs	11805 cfs

03/26/03 1724 - All six CCW pumps shutdown for maintenance.

Diffuser Grab Samples (Outfall 101)	Date/Time	TRC Value ¹	Diffuser Flow (Outfall 101)	River Flow
First Grab	03/26/03 1743	< 0.1 mg/L	668 cfs	16001 cfs
Second Grab	03/26/03 1943	< 0.1 mg/L	353 cfs	27852 cfs
Third Grab	03/26/03 2143	< 0.1 mg/L	329 cfs	34150 cfs
Fourth Grab	03/26/03 2343	< 0.1 mg/L	['] 315 cfs	16712 cfs

¹TVA Internal Chemistry procedure 0-TI-CEM-260-011.9 which is a DPD Ferrous Titrimetric Method defines the operating range of the method as 0.1 to 5.0 mg/L Cl₂. If the sample shows non-detect for TRC this procedure only allows the analyst to report < 0.1 mg/L TRC. As part of our investigation a bench-mark study was performed to show that the DPD Ferrous Titrimetric Method could have a minimum detectable value of 0.05 mg/L TRC using a 100 ml sample volume. Thus, this supports the conclusion that these four grab samples were 0.05 or less mg/L TRC.

March 27, 2003

Plant Status:

Unit 1 - Scheduled Outage; Mode 6

Unit 2 - Forced Outage; Mode 3

03/27/03 1306 - Placed three CCW pumps in service.

Diffuser Grab Samples (Outfall 101)	Date/Time	TRC Value ²	Diffuser Flow (Outfall 101)	River Flow
First Grab	03/27/03 1105	0.02 mg/L	327 cfs	28793 cfs
Second Grab	03/27/03 1305	0.03 mg/L	805 cfs	19359 cfs
Third Grab ³	03/27/03 1600	0.02 mg/L	1256 cfs	20386 cfs
Fourth Grab ³	03/27/03 1812	0.04 mg/L	1261 cfs	21253 cfs

²HACH DR/850 Colorimeter was used for TRC analyses using the DPD Method (powder pillows) with an estimated detection limit of 0.02 mg/L Cl₂.

³Three CCW Pumps returned to service.

Chemical Treatment of Systems for Calculated TRC:

Plant System	Chemical	Chemical	Pumps	System Flow
	Treatment	Concentration	in	D Joioin I low
			Service	
Raw Cooling Water (RCW)	None	None	2	14400 gpm
Essential Raw Cooling Water (ERCW)	None	None	4	Train A: 15300 gpm Train B: 15000 gpm
Condenser Cooling Water (CCW)	None	None	3	540000 gpm
High Pressure Fire Protection (HPFP)	Chlorinated by Hixson Utility (potable water)	0.83 mg/L TRC	leakage	25 gpm
TRC Calculation	Date/Time	TRC Value	Diffuser Flor (Outfall 101)	
Daily calculated sample after 3 CCW pumps are returned to service	03/27/03 1440	< 0.0079 mg/L	1237 cfs	19823 cfs

Conclusion:

This documentation supports that there was very little risk to the receiving waters due to plant systems not being chlorinated during this time period and only HPFP being chlorinated by Hixson Utility (potable water) at 0.78 - 0.83 mg/L TRC with a leak rate of 25 gpm from the HPFP Tank.

Corrective Action:

Problem Evaluation Report (PER) 03-003770-000. The PER was written on 4/3/2003 documenting this problem. The corrective action plan is due on 5/5/2003.

PERMITTEE NAME/ADDRESS (Include Fac Name TVA - SEQUOYAH NUCLEAR Address P.O. BOX 2000	f Different)	NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGE MONITORING REPORT (DMR)					MAJOR SUBR 01)		orm Approv MB No 204		,19		
(INTEROFFICE SB-2A)			TN0	026450			101 T	F - FINAL					
SODDY - DAISY TN 37384 Facility TVA - SEQUOYAH NUCLEAR PL			PERMI	T NUMBER	DISC	CHARG	E NUMBER	BIOMONITORING	FOR OUTFA	ALL 101	l		
Location HAMILTON COUNTY					ITORING PE			EFFLUENT					
ATTM: Hisharl C. Bassass			From 03	MO DA 03 0'			0 DAY 31	*** NO DISCHA	RGE 🔲	***			
ATTN: Michael G. Beavers		•	1 10111 03 1	03 0		03 (03 31	NOTE: Read ins	tructions befor	e compl	mpleting this form		
PARAMETER		QUAN	TITY OR LOADING	-		QUALITY OR CONCENTRATION				NO. EX	FREQUEN		MPLE YPE
		AVERAGE	MAXIMUM	UNITS	мимим	И	AVERAGE	MAXIMUM	UNITS		ANALYSIS	<u>'</u>	IPE
IC25 STATRE 7DAY CHR CERIODAPHNIA	SAMPLE MEASUREMENT	******	*****	**	Monitori Not Requ		*****	******	23				
TRP3B 1 0 0 EFFLUENT GROSS VALUE	PERMIT / REQUIREMENT		******	****	43.9 MINIMU				[PERCENT		QUART		
IC25 STATRE 7DAY CHR PIMEPHALES	SAMPLE MEASUREMENT	******	*****	**	Monitori Not Requ	ng iired	*****	. *****	23				
TRP6C 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			***	43.9 MIMINU			********	PERCENT		QUART ERLY		
	SAMPLE MEASUREMENT												
	PERMIT: REQUIREMENT		****						Ž Ž				然 類
	SAMPLE MEASUREMENT		,										3
	PERMIT REQUIREMENT												
	SAMPLE MEASUREMENT												
	PERMIT REQUIREMENT												
	SAMPLE MEASUREMENT												
	SAMPLE MEASUREMENT	F-/PC- POLE SUZIEND SUPPLEMENT STORY											
	REQUIREMENT.								1				
NAME/TITLE PRINCIPAL EXECUTIVE OFFIC	CER Certify under pe		ument and all attachments			su .	<u> </u>		TELEPH	ONE		DATE	
Richard T. Purcell	properly gather a persons who man	ind evaluate the informati nage the system, or those	on submitted. Based on me persons directly respons to the best of my knowled	ny inquiry of the	e person or ing the	<i>M.</i> (Jurin Environmental S	upervisor	423 84:	3-6700	03	04	14
Site Vice President	accurate, and cor	mplete I am aware that the	nere are significant penalt and imprisonment for kn	ies for submitti	ing false		TURE OF PRINCIP						JI
TYPED OR PRINTED ,			•			UFFI	CER OR AUTHOR	TIZED AGENT	AREA NU CODE	MBER	YEAR	МО	DAY
COMMENTS AND EXPLANATION OF ANY VI Toxicity was not sampled in March 2003.		ence all attachments h	ere)										

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) MAJOR

EPA Form 3320-1 (REV 3/99)

Previous editions may be used

the state of the s				DISCHARGE ELIMINATION SYSTEM (NPDES) MAJOR SE MONITORING REPORT (DMR) (SUBR 01)					Form Approved OMB No 2040-0004					
Address P O BOX 2000		 	TNC	2000450	— —			•			-			
(INTEROFFICE SB-2A)				0026450			100 0	F - FINAL						
SODDY - DAISY TN 37384 Facility TVA - SEQUOYAH NUCLEAR PL	IANT		L PERMI	<u>IT NUMBER</u>	[DIS	3CHAR	GE NUMBER L	OW VOL WAST	E TREA	ATMEN ³	T PON	D		
Location HAMILTON COUNTY			VEAD		ITORING PI			FFLUENT						
ATTN. Michael G. Beavers			From 03	MO DAY 03 01		YEAR 03	03 31	*** NO DISCHA			***	Aram Abia da		
PARAMETER		QUAN	NTITY OR LOADING		<u> </u>		QUALITY OR CONC	NOTE, Read in CENTRATION	structions	T	NO. F	FREQUENC	CY SAF	MPLE
		AVERAGE	MAXIMUM	UNITS	MINIMU	JM	AVERAGE	MAXIMUM	U	NITS	EX	OF ANALYSIS	3 1	YPE
PH	SAMPLE MEASUREMENT	******	*****	**	7.2		*****	8.8		12	0	17 / 31	G	RAB
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT/ REQUIREMENT		****	**	6.0 MINIM	44, 44, 44	7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	9.0 MAXIMUM		I	100	THREE/	A 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	RAB
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	172	468	26	****		10	21		19	0	7/31		RAB
00530 1 0 0 EFFLUENT GROSS VALUE	PERMIT. REQUIREMENT	· [[4] [4] [4] [4] [4] [4] [4] [4] [4] [1250 DAILY MX	LBS/DY	****	XX-25	30 MO AVG	100 DAILY MX	1,474	IG/L	(T. 7.1)	WEEKLY	St. 1 35	RAB
DIL AND GREASE	SAMPLE MEASUREMENT	<79	118	26	****	*** *****	<5	<5		19	0	7/31		RAB
00556 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT:	190 MO AVG	250 DAILY MX	LBS/DY	*****		15 MO AVG	20 DAILY MX	USB 14	IG/L		WEEKL)	/ GI	RAB
LOW, IN CONDUIT OR THRU REATMENT PLANT	SAMPLE MEASUREMENT	1 265	2.837	03	****	**	******	******		**	0	31 / 31		DTAL
0050 1 0 0 FFLUENT GROSS VALUE	PERMIT: REQUIREMENT	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	REPORTS	MGD	*****	**	***	*****	K	**	30 Sept. 15	DAILY.	7 1 to 2 to 2	DTAL*
	SAMPLE MEASUREMENT				Bee of Marie	222.132	The second secon	The No state of the state of th	54		\$75 × 5 1.		D Person	A
	PERMIT REQUIREMENT.					源紫								
	SAMPLE MEASUREMENT		- 11 day - 1 d		S. Janes	20	A. Calamara (1978 St. Marrier)					St. Museria	All the part of the second	2-10-2-
	PERMIT REQUIREMENT								黎					
	SAMPLE MEASUREMENT	1										- CON		
	PERMIT		Frank States				A Company of the Comp		7	<u> </u>				
NAME/TITLE PRINCIPAL EXECUTIVE OFFIC		penalty of law that this docu							TE	LEPHON	NE NE	 	DATE	
Richard T. Purcell	properly gather a	ervision in accordance with and evaluate the information	tion submitted Based on m	my inquiry of the	e person or	Ŋ.	. Bum	1				+		
Site Vice President	information, the id accurate, and co	anage the system, or those information submitted is, to complete. I am aware that the luding the possibility of fine	, to the best of my knowled there are significant penalti	dge and belief, ti Ities for submittir	true, ang false	SIGNA	Environmental Su ATURE OF PRINCIPA	AL EXECUTIVE	423	L	6700	03	04	14
TYPED OR PRINTED	miorinauori, noid	roughing possionity of mis	з апо ипризониети тогы и	Owing Violation:	*	OF!	FICER OR AUTHOR	IZED AGENT	AREA	NUM	MBER	YEAR	МО	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)

Turbine Building Sump was aligned to the Yard Pond on 3/26-3/27 and from 3/30-4/2.

PERMITTEE NAME/ADDRESS (Include F Name TVA - SEQUOYAH NUCLE Address P.O. BOX 2000	f Different) 			IARGE ELIMINA ONITORING F		rstem (NPDES) ((DMR)	MAJOR (SUBR 01)			Form Approved OMB No 2040-0004				
(INTEROFFICE SB-2A)			TNO	026450			107 G	F - FINAL						
SODDY - DAISY TN 37384 Facility TVA - SEQUOYAH NUCLEAR F			PERMI	TNUMBER	R DIS	SCHAR	GE NUMBER	METAL CLEANIN	G WASTI	E POND				
Location HAMILTON COUNTY			MONITORING PERIOD EFFLUENT											
ATTN: Michael G Beavers			From 03 03 01 To 03 03 31 *** NO DISCHARGE NOTE: Read instructions before completing this for									orm		
PARAMETER		QUAN	TITY OR LOADING				QUALITY OR CO			NO.	FREQUEN OF	CY SA	MPLE	
		AVERAGE	MAXIMUM	UNITS	MINIMU	JM	AVERAGE	MAXIMUM	UNI	TS EX	ANALYS	s 1	TYPE	
PH	SAMPLE MEASUREMENT	*****	*****	**	8.5		******	8.9	12	2 0	9/31	G	SRAB	
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT. REQUIREMENT	*****	***	***	6.0 MINIMUM		*****	9.0 MAXIMUM			DAILY	Section .	RAB	
PHOSPHORUS, TOTAL (AS P)	SAMPLE MEASUREMENT	*****	*****	**	*****		*****	2 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	19)		2.0 1 -0 250	(2. *450.5;5°)	
00665 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT			***	***		******	1.0 DAILY MX	MG	/L	DAILY	CO	MPOS	
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	*****	*****	**	*****	**	*****	8	19		9/31	СО	MPOS	
00530 1 0 0 EFFLUENT GROSS VALUE	REQUIREMENT		******	***				30 DAILY MX	MG	/L	DAILY	CO	MPOS	
OIL AND GREASE	SAMPLE MEASUREMENT	******	******	**	*****	**	*****	<5	19	, 0	9/31	G	RAB	
00556 1 0 0 EFFLUENT GROSS VALUE	PERMITA REQUIREMENT	*****		***	*****	**	******	15 DAILY MX	1,254	/L	DAILY	; G	RAB :	
COPPER, TOTAL (AS CU)	SAMPLE MEASUREMENT	*****	*****	**	*****	**	*****	0.010	19	, 0	9/31	СО	MPOS	
01042 1 0 0 EFFLUENT GROSS VALUE	PERMIT	******	******	***			*******	1.0	r201	/L	DAILY	co	MPOS	
IRON, TOTAL (AS FE)	SAMPLE MEASUREMENT	*****	*****	**	****	**	*****	0.25	19	0	9/31	co	MPOS	
01045 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	******	***	*****	**:	******	1.0 DAILY MX	MG/	/L	DAILY	30 304	MPOS	
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	0.036	0.046	03	*****	**	*****	******	**	0	9/31		LCTD	
50050 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	REPORT	REPORT	MGD	\$ ************************************		*****	******			DAILY	,CA	LCTD	
	A Section of Section Section Section	WIND AVG	TOAIC BINIX	****	1377 F4784	<u> </u>				37363	HARLAND.	# 1 2 mg		
NAME/TITLE PRINCIPAL EXECUTIVE OFF		naity of law that this doc	ument and all attachments h à system designed to as	were prepare	d under my	4	, R		TEL	EPHONE		DATE		
Richard T. Purcell	properly gather a persons who man	nd evaluate the informati rage the system, or those	ion submitted. Based on m	ny inquiry of the oble for gatheri	person or	100	l. Been							
Site Vice President	information, the ir accurate, and cor	nformation submitted is , inplete I am aware that the	to the best of my knowled; here are significant penalti a and imprisonment for knowled	ge and belief, t res for submitti	true, ng false		Environmental S	PAL EXECUTIVE	423	843-6700		04	14	
TYPED OR PRINTED	1		OFFICER OR AUTH				FIGER OR AUTHO	KIZED AGENT	AREA CODE	NUMBER	YEAR	МО	DAY	
COMMENTS AND EXPLANATION OF ANY No phosphate bearing chemicals were				an dayer 25	1 2/2 2/5 2	וב מדי	244 247 040	4 2/20						
The promption of the profit of	omproyed. Enled W	ctar i ond was lele	ased ou fue tollowi	iy days; 3/	1, 3/3, 3/5, 3	10,311,	3/14, 3/17, 3/18	, and <i>3/2</i> 0					•	

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) MAJOR

EPA Form 3320-1 (REV 3/99)

Previous editions may be used

PERMITTEE NAME/ADDRESS (Included Name TVA - SEQUOYAH NUCL Address PO BOX 2000		Different)			ARGE ELIMINATION SY DNITORING REPORT	(DMR)	MAJOR (SUBR 01)			orm Approved MB No 2040-
(INTEROFFICE SB-2A)			TNO	026450		110 G	F - FINAL			
SODDY - DAISY TN 37		_	PERMI	T NUMBER	DISCHAR	GE NUMBER	RECYCLED COOLIN	NG WATER	R	
Facility TVA - SEQUOYAH NUCLEA Location HAMILTON COUNTY	AK PLANI		[MON	TORING_PERIOD		EFFLUENT			
ATTN: Michael G. Beavers		·	From 03	MO DA		MO DAY 03 31	*** NO DISCHARO NOTE: Read instru		*** e compi	leting this form
PARAMETER		QUAN	ITITY OR LOADING			QUALITY OR CON	CENTRATION		NO. EX	FREQUENCY OF
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS		ANALYSIS
PH	SAMPLE MEASUREMENT	****	******	**		*****		12		
00400 1 0 0	PERMIT CAPA	*******	******	****	6.0		9.0	ຮບ	3/4/	DAILY,

PARAMETER		QUAN	TITY OR LOADING			QUALITY OR CONC	ENTRATION		<u> </u>	FREQUENCY	
		AVERAGE	MAXIMUM	UNITS	Мимим	AVERAGE	MAXIMUM	UNITS	1	ANALYSIS	
РН	SAMPLE MEASUREMENT	******	*****	**		*****		12			
00400 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT.	****	****	****	6.0	*****	9.0 MAXIMUM	ຮບ		DAILY	GRAB
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	****	******	**	****	*****		19			
00530 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	******	****	****	******	30 DAILY MX	MG/L		DAILY	COMPOS
OIL AND GREASE	SAMPLE MEASUREMENT	*****	*****	**	*****	****		19			
00556 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	*****	*******	***	****	******	15 DAILY MX	MG/L		*DAILY	1. K & The War of the Late of
COPPER, TOTAL (AS CU)	SAMPLE MEASUREMENT	*****	****	**	*****	*****		19			
01042 1 0 0 EFFLUENT GROSS VALUE	PERMIT:	*****		***	*****	******	1.0 DAILY MX.	MG/L		DAILY	COMPOS
IRON, TOTAL (AS FE)	SAMPLE MEASUREMENT	*****	*****	**	******	*****	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	19	3634 14	1.554.175.17	2004
01045 1 0 0 EFFLUENT GROSS VALUE	PERMIT		*****	****	*****		1.0. DAILY MX	MG/L		DAILY	COMPOS
PHOSPHORUS, TOTAL (AS P)	SAMPLE MEASUREMENT	******	*****	**	******	****		19			
00665 1 0 0 EFFLUENT GROSS VALUE	PERMIT			****		******	1.0 DAILY MX	MG/L		· 1000 1000 1000	COMPOS
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT			03	*****	*****	******	**		386	
50050 1 0 0 EFFLUENT GROSS VALUE	PERMIT PERMIT	REPORT	REPORT.	MGD	*******			****		DAILY	CALCTD.

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER	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	4 8	TELEPHONE		DATE		
Richard T. Purcell	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	The Shore					T
Site Vice President	information, the information submitted is , to the best of my knowledge and belief, true,	Environmental Supervisor	423	843-6700	03	04	14
	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	SIGNATURE OF PRINCIPAL EXECUTIVE					j
TYPED OR PRINTED	and and any are possiblely of the sale imprisonment for knowing violations	OFFICER OR AUTHORIZED AGENT	AREA	NUMBER	YEAR	МО	DAY
COMMENTS AND EVEL ANATION OF ANDLESS AS					1	1	1 .

No Discharge this Period

Form Approved OMB No 2040-0004

ERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different) lame TVA - SEQUOYAH NUCLEAR PLANT ddress P O BOX 2000 (INTEROSERGE SP 20)		f Different) 	NATIONAL POLLU DISC	TANT DISCH	ARGE ELIMINA ONITORING R	TION SY	(DMR)	(SUBR 01)			Form Approved OMB No 2040-0004				
(INTEROFFICE SB-2A)		- —		026450		OLIA DA	116 G	F - FINAL BACKWASH							
SODDY - DAISY TN 37384 Facility TVA - SEQUOYAH NUCLEAR PL	ANT		[PERMI	NUMBER	TORING P		GE NUMBER	EFFLUENT							
ocation HAMILTON COUNTY	. — — — — —			MODA	<u>五</u> 「 [2	/EAR		*** NO DISC	HARGE	—					
ATTN. Michael G. Beavers			From 03	03 01	I To _	03	03 31	NOTE, Rea		s before co	omplet	ing this for	m		
PARAMETER		QUAN	TITY OR LOADING				QUALITY OR C	ONCENTRATION			10. EX	REQUENC'		IPLE (PE	
		AVERAGE	MAXIMUM	UNITS	MINIMU	JM	AVERAGE	MAXIMU	M U	NITS		ANALYSIS			
DEBRIS, FLOATING (SEVERITY)	SAMPLE MEASUREMENT	*****	*****	**	*****	**	*****	0		9A	0	1/31	VIS	UAL	
01345 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT		******	***		5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		30 4 73 a 127 65 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 4.89	SS=0	1.20	SEE.	VIS	UAL	
DIL AND GREASE VISUAL	SAMPLE MEASUREMENT	******	0	94	****	**	*****	*****	*	**	0	1/31		UAL	
34066 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT:		REPORT MO TOTAL	YES=1 NO=0						•••	E DI	SEE PERMIT		UAL	
	SAMPLE MEASUREMENT														
	REQUIREMENT														
	SAMPLE MEASUREMENT														
	PERMIT/									3.38					
	SAMPLE MEASUREMENT														
	PERMIT	PER SECTION OF THE PER SECTION O								1 to 1 to 1					
	SAMPLE MEASUREMENT														
	PERMIT REQUIREMENT						學為		FYCE FYCE	£.					
	SAMPLE MEASUREMENT														
	PERMIT REQUIREMENT							The second of th		हैं। }					
NAME/TITLE PRINCIPAL EXECUTIVE OFF	CER It Certify under p	enalty of law that this doc	ument and all attachment	s were prepare	ed under my					ELEPHON	F		DATE		
NAME/TITLE PRINCIPAL EXECUTIVE OFFICER Richard T. Purcell I Certify under penalty of law that direction or supervision in accordance properly gather and evaluate the			h a system designed to a: ion submitted. Based on r	ssure that qual ny inquiry of th	ified personnel le person or	ħ	6 Bon	~				1			
Site Vice President	information submitted is,	e persons directly respons to the best of my knowled here are significant penal	ige and belief,	f, true, 211111011111011111011110111110111111111					843-6 1	700	03	04	14		
TYPED OR PRINTED			e and imprisonment for kr					HORIZED AGENT	AREA CODE	NUME	BER	YEAR	МО	DAY	

Operations performs visual inspections for floating debris and oil and grease during all backwashes.

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different) Name TVA - SEQUOYAH NUCLEAR PLANT		f Different)			ONITORING REPO	ORT (DMR)	MAJOR (SUBR 01)			m Approve MB No 204		,	
Address P O BOX 2000													
(INTEROFFICE SB-2A)			L TNO	026450		117 G	F - FINAL						
SODDY - DAISY TN 37384			PERMI	T NUMBER	R DISCH.	ARGE NUMBER	BACKWASH						
Fadlity TVA - SEQUOYAH NUCLEAR	PLANT		f	MON	ITORING PERI	00	EFFLUENT						
Location HAMILTON COUNTY			YEAR	MO DA									
			From 03	03 0			*** NO DISCHARGE ***						
ATTN Michael G Beavers			110111 03	03 0	1 10 03	00 01	NOTE Read ins	tructions befor	re compli	eting this fo	rm.		
PARAMETER		QUAN	TITY OR LOADING		1	QUALITY OR O	ONCENTRATION		NO.	FREQUENC	Y SA	MPLE	
7747412721		40711	THE ON LONDING						EX	OF ANALYSIS	ΙT	YPE	
		AVERAGE	MAXIMUM '	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS		ANALTSIS	<u> </u>		
DEBRIS, FLOATING (SEVERITY)	SAMPLE MEASUREMENT	*****	*****	**	******	*****	0	9A	0	1/31	VIS	SUAL	
01345 1 0 0 EFFLUENT GROSS VALUE	REQUIREMENT.		*****	****	*****		100 F. 15-15-15 (10)	PASS=0 FAIL=1		SEE:	VI C	SUAL	
OIL AND GREASE VISUAL	SAMPLE MEASUREMENT	******	0	94	*****	*****		**	0	1/31	VIS	SUAL	
84066 1 0 0 EFFLUENT GROSS VALUE	PERMIT REQUIREMENT	******	REPORT	YES=1 NO=0		Anna Carlotte Contraction				SEE.		SUAL	
	SAMPLE MEASUREMENT											•	
	PERMIT REQUIREMENTS												
	SAMPLE MEASUREMENT												
	PERMIT REQUIREMENT												
	SAMPLE MEASUREMENT						12.51 \$40.51 \$2.50 \$40.00 \$40.00 \$2.50 \$4.10 \$4.10 \$4.10 \$4.10 \$4.10 \$4.10 \$4.10 \$4.10 \$4.10 \$4.10 \$4.10 \$4.10					5 2167	
	REQUIREMENT												
	SAMPLE MEASUREMENT	Now I was I was a way					ographia						
								** \$2 \$4	933			的 特別	
	SAMPLE MEASUREMENT	was fundamentan minas bul'su's forces,											
	REQUIREMENT				Action 1991								
NAME/TITLE PRINCIPAL EXECUTIVE OF	FICER Certify under pe	enalty of law that this doc	cument and all attachment	ls were prepare	ed under my			TELEPH	IONE		DATE		
Richard T. Purcell	direction or supe	rvision in accordance wil	h a system designed to a ion submitted. Based on r	ssure that qual	lified personnel	M. Dem	_			-		\top	
	persons who mai	nage the system, or thos	e persons directly respons to the best of my knowled	sible for gather	ring the	Environment	al Supervisor	423 84	3-6700	03	04	14	
Site Vice President	accurate, and co	implete I am aware that t	here are significant penal e and imprisonment for kr	ities for submit	ting false S		NCIPAL EXECUTIVE HORIZED AGENT					<u> </u>	
TYPED OR PRINTED						OFFICER OR AUT		CODE	UMBER	YEAR	МО	DAY	
COMMENTS AND EXPLANATION OF ANY	VIULATIONS (Refere	ence ail attachments f	iere)										

EPA Form 3320-1 (REV 3/99) Previo

Previous editions may be used

Operations performs visual inspections for floating debris and oil and grease during all backwashes.

Page 1 of 1

Address P O BOX 2000								(SUBR 01)		'	JIVID INU ZI	40-000	•
(INTEROFFICE SB-2A)			TNO	026450			118 G	F - FINAL					
SODDY - DAISY TN 37384			PERMI	T NUMBER	≀ Di	SCHAR	GE NUMBER	WASTEWATER	& STOR	M WATER			
Facility TVA - SEQUOYAH NUCLEAR I	PLANT			MON	ITORING_F	EDIOD		EFFLUENT					
Education Training Total Country			YEAR	MO DA		YEAR							
ATTN: Michael G Beavers			From 03	03 0		03	03 31	*** NO DISCH		xx ···	nlatina thia	form	
PARAMETER		ALUO	ITITY OR LOADING				QUALITY OR CO		i struction	NO.			AMOLE
		40/			ļ		QUALITY ON COL	CENTRATION		EX.	OF	- 1 -	
		AVERAGE	MAXIMUM	UNITS	MINIM	UM	AVERAGE	MUMIXAM	U	NITS	ANALYS	IS	
OXYGEN, DISSOLVED (DO)	SAMPLE MEASUREMENT	******	******	**		-	*****	*****		19			
00300 1 0 0 EFFLUENT GROSS VALUE	REQUIREMENT		******	****	2.0	A 30 . W.			N S	IG/L	5-1 16 18 To 100 Feb.	31 94 14052.	
	[在了一个多少的对中。	The late of the Ave	383087777		DAILY		34次分配的	445 1785		143	WEE	<u> </u>	经的结
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	*****	*****	**	****	***	*****			19			
00530 1 0 0	PERMIT	****	13/000000000000000000000000000000000000	****	*****	1 120 AL	******	100	₹ M	G/L	Hatwici	73 50	RAB
EFFLUENT GROSS VALUE	REQUIREMENT					PAG.		DAILY M	7.84	G/L	WEE	وكالود الكام و	Section 1
SOLIDS, SETTLEABLE	SAMPLE MEASUREMENT	*****	******	**	*****	***	*****			25			
00545 1 0 0	PERMIT	20 ********	************	****			*****	E. PERMERANA E.	- N	1 A 34.4	ONCE	77/17	CDAD T
EFFLUENT GROSS VALUE	REQUIREMENT		*****			至470		DAILY MX	8 E		5 13 20 3 14 35	55	24 July 20 1
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT			03	*****	***	*****	******		P# 17.39.39			
50050 1 0 0	PERMIT	REPORT	REPORT	MGD	****	************************************	******	* ******	55	• 325	ONCE	7 × 1 F5	STIMA*
EFFLUENT GROSS VALUE	REQUIREMENT	MO AVG	DAILY MX			7.	Landa 2007 10 10 10 10 10 10 10 10 10 10 10 10 10			A. T.	F 1 2 6 1 1 1 1	100	丁烷的 电电子 二十二
	SAMPLE MEASUREMENT	3.5			1	4-24-77			79.53		, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	19/34-13	T. A. 44.
	PERMIT				15/4/2019/5/5/5/19		Called Free Lord	A SEAR PROPERTY.	<i>पा</i> र	5. 8 ¹³ 47	5 902 FF 4/10	Sec. 1827	Sur Sekar
ĺ	REQUIREMENT				47.53%		Per Carry Valley		34		门政场		是開
	SAMPLE	2	3,13,19,63,		- 19-14 - 13-14 -	LETE THE HETCHING	S. 237 8 8.255 1 - 1 2 3 "	THE SAME A COUNTY OF SAME AS	£ 40 ***	2.64	1 54379,15613	<u> </u>	Sec. 1. Brokhing
	MEASUREMENT								-				
	PERMIT.	THE THE REAL PROPERTY.	PHONE STATE			五洲村			3 4	18.3			383
	KEUDIKEMENT			,									
	SAMPLE MEASUREMENT												
	PERMIT-	The second second			. Zerradinak pala and	- 4-7-11-12	The Market of the State of the		73	276.	1 100 3 7 5 60	बर जिल्ह	
	REQUIREMENT											1 × 20	
NAME/TITLE PRINCIPAL EXECUTIVE OF	FICER I Certify under no	enalty of law that this does	ument and all attachments	t word process	dunder			- was a source seemed to a					
Richard T. Purcell	h a system designed to as	sure that qualit	led personnet	4.	1. Bau		TE	LEPHONE		DATE	, 		
Nicitalu I, Purcell	persons who mar	nage the system, or those	on submitted. Based on me persons directly respons	ible for gathers	ng the	ĮV.	Environmental S	unaniens					
Site Vice President	information, the i	nformation submitted is , i mplete I am aware that th	to the best of my knowled here are significant penalt a and imprisonment for kn	ge and belief, t	rue, no false	SIGNA	ATURE OF PRINCI	PAL EXECUTIVE	423	843-6700	03	04	14
TYPED OR PRINTED			·	ownig violation	•	OF	FICER OR AUTHO	RIZED AGENT	AREA CODE	NUMBER	TWICE/ GRAB WEEK ONCE/ GRAB WEEK ONCE/ GRAB WEEK DATE DATE 0 03 04 14		
COMMENTS AND EXPLANATION OF ANY	VIOLATIONS (Refere	nce all attachments h	ėre)	•					LCODE				أحصا
During this reporting period, there has I				ng from rair	ıfall.								

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) MAJOR

(SUBR 01)

DISCHARGE MONITORING REPORT (DMR)

Form Approved

Page 1 of 1

OMB No 2040-0004

PERMITTEE NAME/ADDRESS (Include Facility Name/Location if Different)

TVA - SEQUOYAH NUCLEAR PLANT

EPA Form 3320-1 (REV 3/99)

Previous editions may be used