



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

August 11, 2011

Ms. Dana Waits
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

Dear Ms. Waits:

SEQUOYAH NUCLEAR PLANT - DISCHARGE MONITORING REPORT FOR JULY 2011

Enclosed is the July 2011 Discharge Monitoring Report for Sequoyah Nuclear Plant. On July 12, 2011 at approximately 15:45 EST, one of the two diffuser gates at Sequoyah failed in the closed position which resulted in loss of flow through the west diffuser pipe.

TVA provided verbal notification to Mr. Paul E. Davis via voice message on July 13, 2011, at 00:23 EST and to Dr. Dick Urban with the Chattanooga Environmental Field Office (EFO) on July 13, 2011, at 07:40 EST. TVA also provided written notification in a letter to Mr. Paul E. Davis dated July 14, 2011. A copy of the written notification is attached along with total suspended solids and oil and grease results from the release.

The failed diffuser gate was successfully lifted and removed on July 14, 2011 at approximately 15:00 EST. Determination of a long term solution is in progress.

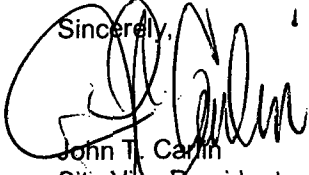
As a result of this event, flooding caused damage to permanent power supplies. Therefore, thermal monitoring instrumentation at Station 12 (Diffuser Pond Discharge) and the numerical model that solves the thermohydrodynamic equation for thermal compliance was determined to be out of service from July 12, 2011 through July 28, 2011. During this period of time, thermal compliance was monitored at Station 8, the backup temperature monitor at the downstream end of the diffuser mixing zone as described by the SQN NPDES Permit.

If you have any questions or need additional information, please contact Brad Love at (423) 843-6714 or Stephanie Howard at (423) 843-6700 of Sequoyah's Environmental staff.

JE25
NIR

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.

Sincerely,



John T. Carlin
Site Vice President
Sequoyah Nuclear Plant

Enclosures

cc (Enclosures):

Chattanooga Environmental Field Office
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, DC 20555

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

Name **TVA - SEQUOYAH NUCLEAR PLANT**
 Address **P.O. BOX 2000**
(INTEROFFICE OPS-5N-SQN)
SODDY - DAISY, TN 37384
 Facility **TVA - SEQUOYAH NUCLEAR PLANT**
 Locatio **HAMILTON COUNTY**

ATTN: Stephanie A. Howard

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

TN0026450 **101 G**
PERMIT NUMBER **DISCHARGE NUMBER**

MAJOR
(SUBR 01)

F - FINAL
 DIFFUSER DISCHARGE
 EFFLUENT

Form Approved.
 OMB No. 2040-0004

MONITORING PERIOD

YEAR	MO	DAY	YEAR	MO	DAY
11	07	01	11	07	31

 From To

*** NO DISCHARGE ☐ ***

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
TEMPERATURE, WATER DEG. CENTIGRADE	SAMPLE MEASUREMENT	*****	*****	**	*****	*****	42.3	04	0	17 / 31	RCORDR
00010 1 0	PERMIT REQUIREMENT	*****	*****	****	*****	*****	Req. Mon. DAILY MAX	DEG. C.		CONTI NUOUS	CALCTD
EFFLUENT GROSS											
TEMPERATURE, WATER DEG. CENTIGRADE	SAMPLE MEASUREMENT	*****	*****	**	*****	*****	30.3	04	0	31 / 31	MODELD
00010 Z 0	PERMIT REQUIREMENT	*****	*****	****	*****	*****	30.5 DAILY MX	DEG. C.		CONTI NUOUS	CALCTD
INSTREAM MONITORING											
TEMP. DIFF. BETWEEN SAMP. & UPSTRM DEG.C	SAMPLE MEASUREMENT	*****	*****	**	*****	*****	2	04	0	31 / 31	CALCTD
00016 1 S	PERMIT REQUIREMENT	*****	*****	****	*****	*****	3 DAILY MX	DEG. C.		CONTI NUOUS	CALCTD
EFFLUENT GROSS											
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	*****	1696	03	*****	*****	*****	**	0	31 / 31	RCORDR
50050 1 0	PERMIT REQUIREMENT	*****	Req. Mon. DAILY MAX	MGD	*****	*****	*****	****		CONTI NUOUS	RCORDR
EFFLUENT GROSS											
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****	**	*****	0.023 0.024 8/9/11	0.058	19	0	25 / 31 23 8/9/11	GRAB
50060 1 0	PERMIT REQUIREMENT	*****	*****	****	*****	0.1 MO AVG	0.1 DAILY MAX	MG/L		FIVE PER WEEK	CALCTD
EFFLUENT GROSS											
TEMPERATURE - C, RATE OF CHANGE	SAMPLE MEASUREMENT	*****	1	62	*****	*****	*****	**	0	31 / 31	CALCTD
82234 1 0	PERMIT REQUIREMENT	*****	2 DAILY MX	DEG C/HR	*****	*****	*****	****		CONTI NUOUS	CALCTD
EFFLUENT GROSS											
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

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 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.	TELEPHONE		DATE		
		AREA CODE	NUMBER	YEAR	MO	DAY
John T. Carlin Sequoyah Site Vice President		423	843-7001	11	08	09
TYPED OR PRINTED						

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

No closed mode operation. Veliger monitoring data is included as an attachment. The following injections occurred: 1. Towerbrom 960 2. Floguard MS6236 (max. calc. conc. was 0.059mg/L--limit 0.2mg/L) 3. Biodetergent 73551 (max. calc. conc. was 0.029mg/L--limit 2.0mg/L) 4. Spectrus CT1300 (max. calc. conc. 0.038mg/L--limit 0.050mg/L)

[illegible]

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

Name **TVA - SEQUOYAH NUCLEAR PLANT**
 Address **P.O. BOX 2000**
 (INTEROFFICE OPS-5N-SQN)
SODDY - DAISY, TN 37384
 Facility **TVA - SEQUOYAH NUCLEAR PLANT**
 Location **HAMILTON COUNTY**

ATTN: Stephanie A. Howard

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

TN0026450 101 T
 PERMIT NUMBER DISCHARGE NUMBER

MONITORING PERIOD
 From YEAR MO DAY To YEAR MO DAY
 11 07 01 11 07 31

MAJOR
 (SUBR 01)

F - FINAL

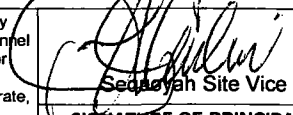
BIOMONITORING FOR OUTFALL 101

EFFLUENT

*** NO DISCHARGE ☐ ***

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
IC25 STATRE 7DAY CHR CERIODAPHNIA	SAMPLE MEASUREMENT	*****	*****	**	Monitoring Not Required	*****	*****	23			
TRP3B 1 0	PERMIT REQUIREMENT	*****	*****	****	43.2 MINIMUM	*****	*****	PERCENT		SEMI ANNUAL	COMPOS
IC25 STATRE 7DAY CHR PIMEPHALES	SAMPLE MEASUREMENT	*****	*****	**	Monitoring Not Required	*****	*****	23			
TRP6C 1 0	PERMIT REQUIREMENT	*****	*****	****	43.2 MINIMUM	*****	*****	PERCENT		SEMI ANNUAL	COMPOS
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER John T. Carlin Sequoyah Site Vice President TYPED OR PRINTED	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.	 Sequoyah Site Vice President SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE		DATE		
			423	843-7001	11	08	09
			AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
 Toxicity was not sampled in July 2011.

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 Location **HAMILTON COUNTY**

ATTN: Stephanie A. Howard

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

MAJOR
 (SUBR 01)

Form Approved.
 OMB No. 2040-0004

TN0026450 **103 G**
PERMIT NUMBER **DISCHARGE NUMBER**

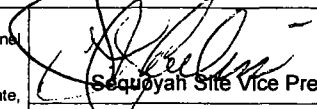
F - FINAL
 LOW VOL. WASTE TREATMENT POND
 EFFLUENT

MONITORING PERIOD						
YEAR	MO	DAY	TO	YEAR	MO	DAY
11	07	01		11	07	31

*** NO DISCHARGE ☐ ***

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
PH	SAMPLE MEASUREMENT	*****	*****	**	7	*****	8	12	0	15 / 31	GRAB
00400 1 0 EFFLUENT GROSS	PERMIT REQUIREMENT	*****	*****	**	6 MINIMUM	*****	9 MAXIMUM	SU		THREE/ WEEK	GRAB
SOLIDS, TOTAL SUSPENDED	SAMPLE MEASUREMENT	*****	*****	**	*****	10	10	19	0	2 / 31	GRAB
00530 1 0 EFFLUENT GROSS	PERMIT REQUIREMENT	*****	*****	**	*****	30 MO AVG	100 DAILY MX	MG/L		TWICE/ MONTH	GRAB
OIL AND GREASE	SAMPLE MEASUREMENT	*****	*****	**	*****	<5	<6	19	0	2 / 31	GRAB
00556 1 0 EFFLUENT GROSS	PERMIT REQUIREMENT	*****	*****	**	*****	15 MO AVG	20 DAILY MX	MG/L		TWICE/ MONTH	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	1.127	1.451	03	*****	*****	*****	**	0	31 / 31	RCORDR
50050 1 0 EFFLUENT GROSS	PERMIT REQUIREMENT	Req. Mon. MO AVG	Req. Mon DAILY MX	MGD	*****	*****	*****	**		SEE PERMIT	RCORDR
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER John T. Carlin Sequoyah Site Vice President TYPED OR PRINTED	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.	 Sequoyah Site Vice President SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE		DATE		
			423	843-7001	11	08	09
			AREA CODE	NUMBER	YEAR	MO	DAY

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

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

Name **TVA - SEQUOYAH NUCLEAR PLANT**
 Address **P.O. BOX 2000**
(INTEROFFICE OPS-5N-SQN)
SODDY - DAISY, TN 37384
 Facility **TVA - SEQUOYAH NUCLEAR PLANT**
 Locatio **HAMILTON COUNTY**

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

MAJOR
 (SUBR 01)

Form Approved.
 OMB No. 2040-0004

TN0026450	110 G
PERMIT NUMBER	DISCHARGE NUMBER

F - FINAL
 RECYCLED COOLING WATER
 EFFLUENT

MONITORING PERIOD						
YEAR	MO	DAY	YEAR	MO	DAY	
11	07	01	To	11	07	31

From

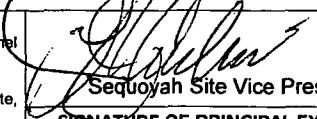
To

*** NO DISCHARGE ☒ ***

NOTE: Read instructions before completing this form.

ATTN: Stephanie A. Howard

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM			
TEMPERATURE, WATER DEG. CENTIGRADE	SAMPLE MEASUREMENT	*****	*****	**	*****	*****		04		
00010 1 0	PERMIT REQUIREMENT	*****	*****	**	*****	*****	REPORT DAILY MX	DEG C	CONTINUOUS	CALCULATED
EFFLUENT GROSS VALUE										
TEMPERATURE, WATER DEG. CENTIGRADE	SAMPLE MEASUREMENT	*****	*****	**	*****	*****		04		
00010 Z 0	PERMIT REQUIREMENT	*****	*****	**	*****	*****	30.5 DAILY MX	DEG C	CONTINUOUS	CALCULATED
INSTREAM MONITORING										
TEMP. DIFF. BETWEEN SAMP. & UPSTRM DEG.C	SAMPLE MEASUREMENT	*****	*****	**	*****	*****		04		
00016 1 0	PERMIT REQUIREMENT	*****	*****	**	*****	*****	5 DAILY MX	DEG C	CONTINUOUS	CALCULATED
EFFLUENT GROSS VALUE										
FLOW, IN CONDUIT OR THRU TREATMENT PLANT	SAMPLE MEASUREMENT	*****		03	*****	*****	*****	**		
50050 1 0	PERMIT REQUIREMENT	*****	Req. Mon. DAILY MX	MGD	*****	*****	*****	**	CONTINUOUS	RECORD
EFFLUENT GROSS VALUE										
CHLORINE, TOTAL RESIDUAL	SAMPLE MEASUREMENT	*****	*****	**	*****			19		
50060 1 0	PERMIT REQUIREMENT	*****	*****	**	*****	0.1 MO AVG	0.1 DAILY MX	MG/L	Five per Week	CALCULATED
EFFLUENT GROSS VALUE										
TEMPERATURE - C, RATE OF CHANGE	SAMPLE MEASUREMENT	*****		04	*****	*****	*****	**		
82234 1 0	PERMIT REQUIREMENT	*****	2 DAILY MX	DEG C	*****	*****	*****	**	CONTINUOUS	CALCULATED
EFFLUENT GROSS VALUE										
	SAMPLE MEASUREMENT									
	PERMIT REQUIREMENT									

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER John T. Carlin Sequoyah Site Vice President TYPED OR PRINTED	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.	 Sequoyah Site Vice President SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE		DATE		
			423	843-7001	11	08	09
			AREA CODE	NUMBER	YEAR	MO	DAY

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

No Discharge this Period

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

Name **TVA - SEQUOYAH NUCLEAR PLANT**

Address **P.O. BOX 2000**

(INTEROFFICE OPS-5N-SQN)

SODDY - DAISY, TN 37384

Facility **TVA - SEQUOYAH NUCLEAR PLANT**

Location **HAMILTON COUNTY**

ATTN: Stephanie A. Howard

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)

MAJOR
(SUBR 01)

Form Approved.
OMB No. 2040-0004

TN0026450
PERMIT NUMBER

110 T
DISCHARGE NUMBER

MONITORING PERIOD					
YEAR	MO	DAY	YEAR	MO	DAY
11	07	01	11	07	31

From

To

F - FINAL
RECYCLED COOLING WATER
EFFLUENT


*** NO DISCHARGE ☒ ***

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
IC25 STATRE 7DAY CHR CERIODAPHNIA	SAMPLE MEASUREMENT	*****	*****	**		*****	*****	23			
TRP3B 1 0 0	PERMIT REQUIREMENT	*****	*****	****	43.2 MINIMUM	*****	*****	PERCENT		SEMI ANNUAL	COMPOS
IC25 STATRE 7DAY CHR PIMEPHALES	SAMPLE MEASUREMENT	*****	*****	**		*****	*****	23			
TRP6C 1 0 0	PERMIT REQUIREMENT	*****	*****	****	43.2 MINIMUM	*****	*****	PERCENT		SEMI ANNUAL	COMPOS
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER
John T. Carlin
Sequoyah Site Vice President
TYPED OR PRINTED

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.


Sequoyah Site Vice President
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE		DATE		
423	843-7001	11	08	09
AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
No Discharge this Period

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

Name **TVA - SEQUOYAH NUCLEAR PLANT**
 Address **P.O. BOX 2000**
(INTEROFFICE OPS-5N-SQN)
SODDY - DAISY, TN 37384
 Facility **TVA - SEQUOYAH NUCLEAR PLANT**
 Location **HAMILTON COUNTY**

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
 DISCHARGE MONITORING REPORT (DMR)

MAJOR
 (SUBR 01)

Form Approved.
 OMB No. 2040-0004

TN0026450
PERMIT NUMBER

118 G
DISCHARGE NUMBER

F - FINAL
 WASTEWATER & STORM WATER
 EFFLUENT

MONITORING PERIOD

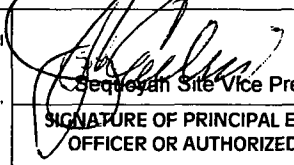
YEAR	MO	DAY	YEAR	MO	DAY
11	07	01	11	07	31

From To

*** NO DISCHARGE ☒ ***

NOTE: Read instructions before completing this form.

PARAMETER		QUANTITY OR LOADING			QUALITY OR CONCENTRATION				NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	MINIMUM	AVERAGE	MAXIMUM	UNITS			
OXYGEN, DISSOLVED (DO) 00300 1 0 EFFLUENT GROSS	SAMPLE MEASUREMENT	*****	*****	**		*****	*****	19			
	PERMIT REQUIREMENT	*****	*****	****	2 MINIMUM	*****	*****	MG/L		TWICE/ WEEK	GRAB
SOLIDS, TOTAL SUSPENDED 00530 1 0 EFFLUENT GROSS	SAMPLE MEASUREMENT	*****	*****	**	*****	*****		19			
	PERMIT REQUIREMENT	*****	*****	****	*****	*****	100 DAILY MX	MG/L		TWICE/ WEEK	GRAB
SOLIDS, SETTLEABLE 00545 1 0 EFFLUENT GROSS	SAMPLE MEASUREMENT	*****	*****	**	*****	*****		25			
	PERMIT REQUIREMENT	*****	*****	****	*****	*****	1 DAILY MX	ML/L		ONCE/ MONTH	GRAB
FLOW, IN CONDUIT OR THRU TREATMENT PLANT 50050 1 0 EFFLUENT GROSS	SAMPLE MEASUREMENT			03	*****	*****	*****	**			
	PERMIT REQUIREMENT	Req. Mon. MO AVG	Req. Mon. DAILY MX	MGD	*****	*****	*****	*		ONCE/ BATCH	ESTIMA
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										
	SAMPLE MEASUREMENT										
	PERMIT REQUIREMENT										

NAME/TITLE PRINCIPAL EXECUTIVE OFFICER John T. Carlin Sequoyah Site Vice President TYPED OR PRINTED	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.	 Sequoyah Site Vice President SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE		DATE		
			423	843-7001	11	08	09
			AREA CODE	NUMBER	YEAR	MO	DAY

COMMENTS AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here)
 During this reporting period, there has been no flow from the Dredge Pond other than that resulting from rainfall.



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

July 14, 2011

Mr. Paul E. Davis, Director
Division of Water Pollution Control
Department of Environment and Conservation
6th Floor, L & C Annex
401 Church Street, Nashville, TN 37243

Dear Mr. Davis:

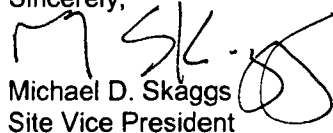
TENNESSEE VALLEY AUTHORITY (TVA) - SEQUOYAH NUCLEAR PLANT NPDES PERMIT NO. TN0026450 - WRITTEN SUBMISSION REGARDING DIFFUSER POND RELEASE

TVA is providing written notification for the subject release that occurred on July 12, 2011. The verbal notification for the diffuser pond release was provided by telephone notification to you via voice message on July 13, 2011, at 0023 and to Dr. Richard Urban with the Chattanooga Environmental Field Office (EFO) on July 13, 2011, at 0740. Please see the Attachment (enclosed) for details of the event. Site personnel visually surveyed the near-shore area by foot and observed no fish distress, fish mortality, abnormal bird migration, oil sheen, or floating solids during the early evening hours of the event.

If you have any questions or need additional information, please contact Stephanie Howard of Sequoyah's Environmental staff at (423) 843-6700.

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.

Sincerely,



Michael D. Skaggs
Site Vice President
Sequoyah Nuclear Plant

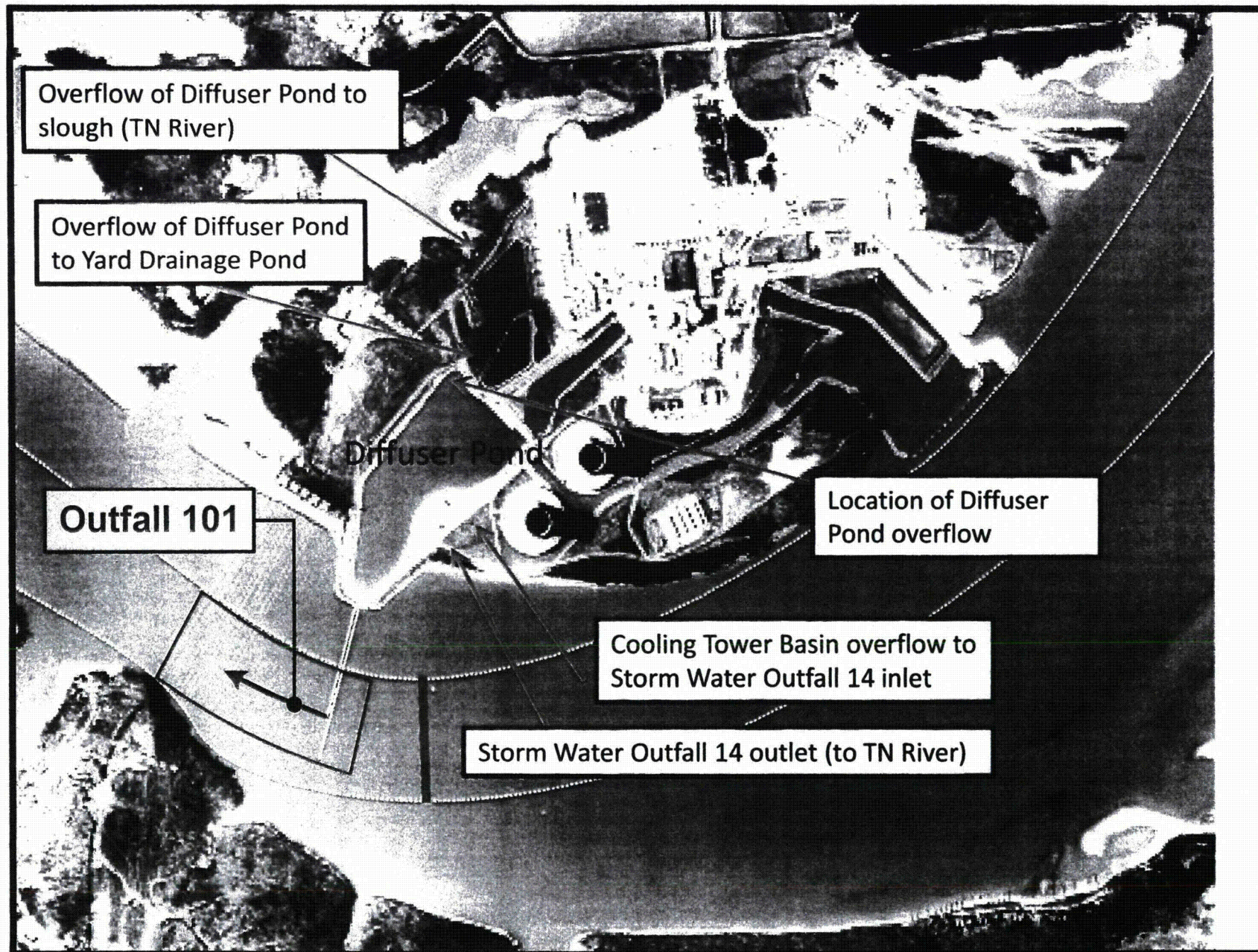
Enclosures

cc (Enclosures):

Chattanooga Environmental Field Office
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, DC 20555

Sequoyah Nuclear Plant – Photo Showing Diffuser Pond Overflow



Attachment
Sequoyah Nuclear Plant Diffuser Pond Release
07/12/2011

Description of the Discharge and Determination of Cause:

At approximately 15:45 EST on 7/12/11, one of the two diffuser gates at Sequoyah failed in the closed position, resulting in loss of flow through the west diffuser pipe. The east diffuser pipe remained open and continued to discharge via Outfall 101. Plant personnel made several unsuccessful attempts to raise the diffuser gate utilizing divers, multiple rigging techniques, and cranes with various capacities.

At approximately 20:00 EST, the northwest corner of the Diffuser Pond overflowed into a drainage ditch to the Yard Drainage Pond. The drainage ditch is designed to route storm water from the construction and demolition landfill to the Yard Drainage Pond. The Diffuser Pond contains predominantly condenser circulating water (CCW) used in the secondary (non-nuclear) side for cooling along with yard drainage from the Yard Drainage Pond and low volume waste from the Low Volume Waste Treatment Pond (IMP 103).

Due to increasing water level in the Yard Drainage Pond, the flow also started to move westward through a heavily vegetated area approximately 0.10 mile to a slough at 21:30 EST. This slough is between the Sequoyah Training Center and site contractor parking lot. As pond levels continued to increase, the Cooling Tower Basin (containing CCW) overflowed into the river through Storm water Outfall 14 (SW 14) located near the cooling towers. The Diffuser Pond never breached the dike between the Diffuser Pond and the Tennessee River.

When it was determined that the diffuser gate could not be opened and pond levels continued to rise, both units were derated to 85% power. This allowed the safe removal of two CCW pumps from service, reducing input into the Diffuser Pond by approximately 374,000 gpm. The cooling towers remained in service during this event and are still in operation.

During the releases, site personnel visually monitored by boat and land Outfall 101 and the overflow to the slough for floating solids and debris and none were observed. Site personnel visually surveyed the near-shore area by foot and observed no fish distress, fish mortality, abnormal bird migration, oil sheen, or floating solids during the early evening hours of the event. This was confirmed by boat with TVA biologists on 7/13/11. At this time, SQN is unable to determine the volume of the releases.

Period of Discharge to the Tennessee River:

The Diffuser Pond started to discharge to the slough at 21:30 EST on 7/12/11 and continued until 01:00 EST on 7/13/11. The Cooling Tower Basin discharged to SW 14 for a maximum of four hours. The storm water outfall was observed at 21:00 EST on 7/12/11 to have no flow. However at 23:00 EST, flow was observed. At 00:50 EST on 7/13/11, flow at SW 14 had stopped.

Steps Being Taken to Reduce, Eliminate, and Prevent Recurrence

SQN has documented the release in the TVA Corrective Action Program and is in the process of determining corrective actions to reduce and prevent recurrence of these releases. Updates will be provided in the July DMR.

To date, two CCW pumps remain out of service in order to reduce flow entering the Diffuser Pond. This has been effective in both lowering the Diffuser Pond level and stopping the releases.

The Diffuser Pond gate closed due to the failure of pulley components during gate maintenance. On 7/13/11, an attempt to lift the gate was unsuccessful. SQN continued to work through this issue by installing new pulley components directly to the gate in an attempt to use the existing hoist system to lift it. The gate was lifted and removed at approximately 15:00 EST on 7/14/11. The Diffuser Pond water level continues to decrease to normal levels.

Additional Details:

The Diffuser Pond water was sampled just prior to entering the slough at 00:10 EST on 7/13/11. The temperature was 94.8 deg F. Oil and grease (O&G) and Total Suspended Solids (TSS) from this location were also collected and are currently pending analysis. It should be noted that the temperature from a grab sample taken at in the south end of the Diffuser Pond at 23:00 EST on 7/12/11 was 102 deg F.

In addition, plant personnel mobilized a boat and crew to monitor the slough for temperature, pH, TSS, O&G, and Total Residual Chlorine (TRC). Results of samples taken in the slough are:

Sample Location	Date	Time (EST)	Temperature (°F)	TRC (mg/L)	pH
Water at point of entry in slough	07/13/11	00:48	91.8	0.09	6.75
Sample at 30 yards from point of entry	07/13/11	00:37	87.5	0.07	8.07
Water at point of entry in slough	07/13/11	01:39	88.1	0.08	7.21
Sample at 30 yards from point of entry	07/13/11	01:48	88.6	0.06	7.23

Note: These samples were taken to determine representative conditions in the slough and cannot be compared directly with the NPDES permit limits for Outfall 101.

Note: TSS and O&G samples were collected and sent to an offsite laboratory for analyses as a precautionary measure.

Note: The TRC values are within the permit limit of 0.1 mg/L. It is suspected that the results noted above are high due to manganese interference which is commonly seen in river sample matrix. A sample of the river was collected to determine background. The sample was 0.05 mg/L, confirming the interference. The TRC results above are uncorrected.



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REPORT OF ANALYSIS

July 15, 2011

Brad Love
TVA-Sequoyah Nuclear Plant
P.O.Box 2000
Soddy-Daisy, TN 37384

Date Received : 07/14/11 09:00
Description : NPDES WW Samples

Sample ID : STREAM-BEFORE ENTRY TO SLOUGH

Collected By : Brad Love
Collection Date : 07/13/11 00:01

ESC Sample # : L525785-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Oil & Grease (Hexane Extr)	BDL	5.3	mg/l	1664A	07/14/11 1520	541	07/14/11 2229	PAD

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:


AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
KY - 90010, NC - ENV375, DW21704, ND - R-140, SC - 84004, TN - 2006, VA - 00109, WV - 233
AZ -0612, MN - 047-999-395, NY - 11742, NJ - TN002, WI - 998093910

Notes:

The reported analytical results relate only to the sample submitted

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Reported: 07/15/11 08:55 Printed: 07/15/11 08:55

Company Name/Address				Alternate Billing				Analysis/Container/Preservative				Chain of Custody Page 1 of 1			
TVA - SQN PO # 68872				Stephanie Howard <u>sahoward@tva.gov</u>								Prepared by:			
Soddy-Daisy, Tennessee				Report to: Brad Love								 ENVIRONMENTAL Science corp 12065 Lebanon Road Mt. Juliet TN 37122 Phone (615)758-5858 Phone (800) 767-5859 FAX (615)758-5859			
Project Description: NPDES WW Samples															
PHONE: 423-843-6714		Client Project No.		Lab Project #											
FAX: 423-843-7080															
Collected by: <u>Brad Love</u>		Site/Facility ID#		P.O.# 68872											
Collected by (signature): <u>[Signature]</u>		<input checked="" type="checkbox"/> Rush? (Lab MUST be Notified) <input checked="" type="checkbox"/> Same Day.....200% <input type="checkbox"/> Next Day.....100% <input type="checkbox"/> Two Day.....50%		Date Results Needed ASAP - RUSH EMAIL? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes FAX? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes		No									
Immediately Packed on Ice N <input checked="" type="checkbox"/>						of									
Sample ID		Comp/Grab	Matrix	Depth	Date	Time	Cntrs	NPDES ISS							
Stream - Before Entry to Slough		Grab	WW		7/13/11	0001	1	X							



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REPORT OF ANALYSIS

July 15, 2011

Brad Love
TVA-Sequoyah Nuclear Plant
P.O.Box 2000
Soddy-Daisy, TN 37384

Date Received : 07/14/11 09:00
Description : NPDES WW Samples

Sample ID : STREAM-BEFORE ENTRY TO SLOUGH

Collected By : Brad Love
Collection Date : 07/13/11 00:01

ESC Sample # : L525783-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Suspended Solids	2.4	1.0	mg/l	2540D	07/14/11 1610	36	07/14/11 1614	MF

BDL - Below Detection Limit
Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:
AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
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L525783-01 (TSS) - Sample split with duplicate.







[illegible]

*Matrix: SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT- Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquisher by: (Signature) 	Date: 7/13/11	Time: 1000	Received by: (Signature) 	Samples returned via: FedEx <input checked="" type="checkbox"/> UPS <input type="checkbox"/> Other <input type="checkbox"/>		Condition: (lab use only)	
Relinquisher by: (Signature) 	Date:	Time:	Received by: (Signature) 	Temp: 3/10	Bottles Received: 1 FB	cast OK	
Relinquisher by: (Signature) 	Date:	Time:	Received for lab by: (Signature) 	Date: 7-14-11	Time: 900	pH Checked: 102	NCF: 100



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July 15, 2011

Brad Love
TVA-Sequoyah Nuclear Plant
P.O.Box 2000
Soddy-Daisy, TN 37384

Date Received : 07/14/11 09:00
Description : NPDES WW Samples
Sample ID : A SLOUGH MIXING
Collected By : Brad Love
Collection Date : 07/13/11 00:48

ESC Sample # : L525792-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Oil & Grease (Hexane Extr)	BDL	5.3	mg/l	1664A	07/14/11 1520	541	07/14/11 2229	PAD

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit(PQL)

Laboratory Certification Numbers:

AIHA - 09227, AL - 40660, CA - I-2327, CT- PH-0197, FL - E87487, GA - 923, IN - C-TN-01
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[illegible]

*Matrix: SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT- Other_____

pH _____ Temp _____

Remarks:

Flow _____ Other _____

Relinquisher by: (Signature)	Date: 7/13/11	Time: 1100	Received by: (Signature)	Samples returned via: FedEx UPS Other	Condition (lab use only)
Relinquisher by: (Signature)	Date:	Time:	Received by: (Signature)	Temp: 31.2°	Bottles Received: 100
Relinquisher by: (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: 7-14-11	Time: 100
					pH Checked: NCF



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July 15, 2011

Brad Love
TVA-Sequoyah Nuclear Plant
P.O.Box 2000
Soddy-Daisy, TN 37384

Date Received : 07/14/11 09:00
Description : NPDES WW Samples
Sample ID : A SLOUGH MIXING
Collected By : Brad Love
Collection Date : 07/13/11 00:48

ESC Sample # : L525794-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Suspended Solids	2.4	1.0	mg/l	2540D	07/14/11 1610	36	07/14/11 1614	MF

BDL - Below Detection Limit


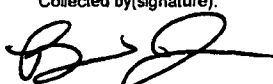
Det. Limit - Practical Quantitation Limit (PQL)

Laboratory Certification Numbers:

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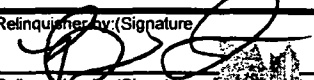






Company Name/Address TVA - SQN PO # 68872 Soddy-Daisy, Tennessee				Alternate Billing Stephanie Howard <u>sahoward@tva.gov</u> Report to: Brad Love E-mail to: bmllove@tva.gov				Analysis/Container/Preservative				Prepared by:  ENVIRONMENTAL Science corp 12065 Lebanon Road Mt. Juliet TN 37122 Phone (615)758-5858 Phone (800) 767-5859 FAX (615)758-5859		
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Collected by: <u>Brad Love</u>				Site/Facility ID#				P.O.# 68872						
Collected by (signature): 				<input checked="" type="checkbox"/> Rush? (Lab MUST be Notified) <input checked="" type="checkbox"/> Same Day.....200% <input type="checkbox"/> Next Day.....100% <input type="checkbox"/> Two Day.....50%				Date Results Needed ASAP - RUSH EMAIL? <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes FAX? <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes				No of Cntrs		
Immediately Packed on Ice N <input checked="" type="checkbox"/>														
Sample ID	Comp/Grab	Matrix	Depth	Date	Time								Remarks/contaminant	Sample # (lab only)
Slough - 30 Yards Out	Grab	WW		7/13/11	0037	1								LS-1980-1

*Matrix: SS-Soil/Solid GW-Groundwater WW-Wastewater DW-Drinking Water OT-Other _____

pH _____ Temp _____

Flow _____ Other _____

Remarks:

Relinquisher by (Signature) 	Date: 7/13/11	Time: 1000	Received by (Signature) 	Samples returned via: FedEx <input checked="" type="checkbox"/> UPS <input type="checkbox"/> Other <input type="checkbox"/>	Condition (lab use only) 
Relinquisher by (Signature) 	Date:	Time:	Received by (Signature) 	Temp: 3.6	Bottles Received: 1
Relinquisher by (Signature) 	Date:	Time:	Received for lab by (Signature) 	Date: 7/14/11	Time: 08:30
				pH Checked	NCE



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REPORT OF ANALYSIS

July 15, 2011

Brad Love
TVA-Sequoyah Nuclear Plant
P.O.Box 2000
Soddy-Daisy, TN 37384

Date Received : 07/14/11 08:30
Description : NPDES WW Samples
Sample ID : SLOUGH 30 YARDS OUT
Collected By : Brad Love
Collection Date : 07/13/11 00:37

ESC Sample # : L525798-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Suspended Solids	2.2	1.0	mg/l	2540D	07/14/11 1610	36	07/14/11 1614	MF

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Laboratory Certification Numbers:

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Soddy-Daisy, TN 37384

July 15, 2011

Date Received : 07/14/11 08:30
Description : NPDES WW Samples
Sample ID : SLOOSH-30 YARDS OUT
Collected By : Brad Love
Collection Date : 07/13/11 00:37

ESC Sample # : L525789-01

Site ID :

Project # :

Parameter	Result	Det. Limit	Units	Method	Prep	PID	Analyzed	AID
Oil & Grease (Hexane Extr)	BDL	5.3	mg/l	1664A	07/14/11 1520	541	07/14/11 2229	PAD

BDL - Below Detection Limit

Det. Limit - Practical Quantitation Limit (PQL)

Laboratory Certification Numbers:

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