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Tennessee Valley Authority, Sequoyah Nuclear Plant, P.O. Box 2000, Soddy Daisy, TN 37384

November 15, 2021

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Subject: **Sequoyah Nuclear Plant, Discharge Monitoring Report (DMR), September 2021**

Attached is the September 2021 DMR for Sequoyah Nuclear Plant.

Respectfully,

A handwritten signature in black ink, appearing to read "T.R. Markum", is written above the typed name.

Travis R. Markum  
Environmental Scientist

**DMR Copy of Record**

<b>Permit</b>			
<b>Permit #:</b>	<b>TN0026450</b>	<b>Permittee:</b>	Tennessee Valley Authority (TVA)
<b>Major:</b>	Yes	<b>Permittee Address:</b>	Sequoyah Access Road, PO Box 2000 Soddy Daisy, TN 37379
<b>Permitted Feature:</b>	101 External Outfall	<b>Discharge:</b>	<b>101-G</b> (no description)
<b>Facility:</b>	TVA SEQUOYAH NUCLEAR PLANT (SQN)		
<b>Facility Location:</b>	SEQUOYAH ACCESS ROAD SODDY DAISY, TN 37379		

<b>Report Dates &amp; Status</b>			
<b>Monitoring Period:</b>	<b>From 09/01/21 to 09/30/21</b>	<b>DMR Due Date:</b>	<b>10/15/21</b>
<b>Status:</b>	<b>NetDMR Validated</b>		

**Considerations for Form Completion**  
Primary discharge from Diffuser Pond.

<b>Principal Executive Officer</b>			
<b>First Name:</b>	Thomas	<b>Title:</b>	Vice President
<b>Last Name:</b>	Marshall	<b>Telephone:</b>	423-843-7001

**No Data Indicator (NODI)**  
Form NODI: --

Code	Parameter Name	Monitoring Location	Season #	Param. NODI	Quantity or Loading					Quality or Concentration					# of Ex.	Frequency of Analysis	Sample Type							
					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3				Value 3	Units					
00010	Temperature, water deg. centigrade	1 - Effluent Gross	0	--	Sample								=	40.7		04 - deg C	99/99 - Continuous	RC - Recorder (auto)						
					Permit Req.													Req Mon DAILY MX	04 - deg C	RC - Recorder (auto)				
					Value NODI																			
00010	Temperature, water deg. centigrade	Z - Instream Monitoring	0	--	Sample								=	28.1		04 - deg C	99/99 - Continuous	CA - CALCTD						
					Permit Req.													<=	30.5 DAILY MX	04 - deg C	CA - CALCTD			
					Value NODI																			
00016	Temp. diff. between samp. & upstrm deg. C	1 - Effluent Gross	1	--	Sample								=	2.0		04 - deg C	99/99 - Continuous	CA - CALCTD						
					Permit Req.													<=	3.0 DAILY MX	04 - deg C	CA - CALCTD			
					Value NODI																			
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample	=	1747.9	=	1759.2	03 - MGD								99/99 - Continuous	RC - Recorder (auto)					
					Permit Req.		Req Mon MO AVG		Req Mon DAILY MX	03 - MGD											99/99 - Continuous	RC - Recorder (auto)		
					Value NODI																			
50060	Chlorine, total residual	1 - Effluent Gross	0	--	Sample								<=	0.027 MO AVG				01/07 - Weekly	GR - GRAB					
					Permit Req.																			
					Value NODI																			
82234	Temperature rate of change deg. C/hr	Z - Instream Monitoring	0	--	Sample			=	0.2	62 - deg C/hr								99/99 - Continuous	CA - CALCTD					
					Permit Req.			<=	2.0 DAILY MX	62 - deg C/hr											99/99 - Continuous	CA - CALCTD		
					Value NODI																			
TRP3B	IC25 Static Renewal 7 Day Chronic Chrceriodaphnia	1 - Effluent Gross	0	--	Sample								>	100.0		23 - %	01/30 - Monthly	CP - COMPOS						
					Permit Req.																>	69.0 MINIMUM	23 - %	CP - COMPOS
					Value NODI																			
TRP6C	IC25 Static Renewal 7 Day Chronic Chrpimephales	1 - Effluent Gross	0	--	Sample								>	100.0		23 - %	01/30 - Monthly	CP - COMPOS						
					Permit Req.																>	69.0 MINIMUM	23 - %	CP - COMPOS
					Value NODI																			

**Submission Note**  
If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

**Edit Check Errors**  
No errors.

**Comments**

Method Detection Limit for Total Residual Chlorine is 0.05 mg/L.

**Attachments**

Name	Type	Size
SQN_Sep_2021_Biomonitoring_Report.pdf	pdf	5035113.0

**Report Last Saved By**

**Tennessee Valley Authority (TVA)**

User: TRMARKUM  
Name: Travis Markum  
E-Mail: trmarkum@tva.gov  
Date/Time: 2021-10-06 11:25 (Time Zone: -05:00)

**Report Last Signed By**

User: TMCMUTUA  
Name: Tony McMutuary  
E-Mail: tmcmutuary@tva.gov  
Date/Time: 2021-10-07 13:45 (Time Zone: -05:00)

## DMR Copy of Record

Permit																				
Permit #:	TN0026450	Permittee:	Tennessee Valley Authority (TVA)	Facility:	TVA SEQUOYAH NUCLEAR PLANT (SQN)															
Major:	Yes	Permittee Address:	Sequoyah Access Road, PO Box 2000 Soddy Daisy, TN 37379	Facility Location:	SEQUOYAH ACCESS ROAD SODDY DAISY, TN 37379															
Permitted Feature:	103 Internal Outfall	Discharge:	103-G (no description)																	
Report Dates & Status																				
Monitoring Period:	From 09/01/21 to 09/30/21	DMR Due Date:	10/15/21	Status:	NetDMR Validated															
Considerations for Form Completion																				
Internal Monitoring Point for various flows from Low Volume Waste Treatment Pond to Diffuser Pond, which eventually discharges through Outfall 101.																				
Principal Executive Officer																				
First Name:	Thomas	Title:	Vice President	Telephone:	423-843-7001															
Last Name:	Marshall																			
No Data Indicator (NODI)																				
Form NODI:	--																			
Code	Parameter Name	Monitoring Location	Season #	Param. NODI	Quantity or Loading					Quality or Concentration						# of Ex.	Frequency of Analysis	Sample Type		
					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3				Units	
00400	pH	IM - Internal Monitoring Point	0	--	Sample						=	7.4			=	7.4	12 - SU	01/30 - Monthly	GR - GRAB	
					Permit Req.					>=	6.0 MINIMUM			<=	9.0 MAXIMUM	12 - SU				
					Value NODI															
00530	Solids, total suspended	IM - Internal Monitoring Point	0	--	Sample									=	13.5	=	13.6	19 - mg/L	01/30 - Monthly	GR - GRAB
					Permit Req.								<=	30.0 MO AVG	<=	100.0 DAILY MX	19 - mg/L			
					Value NODI															
00556	Oil & Grease	IM - Internal Monitoring Point	0	--	Sample									<	4.9	<	4.9	19 - mg/L	01/30 - Monthly	GR - GRAB
					Permit Req.								<=	15.0 MO AVG	<=	20.0 DAILY MX	19 - mg/L			
					Value NODI															
50050	Flow, in conduit or thru treatment plant	IM - Internal Monitoring Point	0	--	Sample	=	1.128	=	1.128	03 - MGD								01/30 - Monthly	IN - INSTAN	
					Permit Req.		Req Mon MO AVG		Req Mon DAILY MX	03 - MGD									01/30 - Monthly	IN - INSTAN
					Value NODI															
Submission Note																				
If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.																				
Edit Check Errors																				
No errors.																				
Comments																				
Attachments																				
No attachments.																				
Report Last Saved By																				
Tennessee Valley Authority (TVA)																				
User:	TRMARKUM																			
Name:	Travis Markum																			
E-Mail:	trmarkum@tva.gov																			
Date/Time:	2021-10-06 11:27 (Time Zone: -05:00)																			
Report Last Signed By																				
User:	TMCMUTUA																			
Name:	Tony McMutuary																			
E-Mail:	tmcmutuary@tva.gov																			
Date/Time:	2021-10-07 13:45 (Time Zone: -05:00)																			

## DMR Copy of Record

Permit																				
Permit #:	TN0026450			Permittee:	Tennessee Valley Authority (TVA)			Facility:	TVA SEQUOYAH NUCLEAR PLANT (SQN)											
Major:	Yes			Permittee Address:	Sequoyah Access Road, PO Box 2000 Soddy Daisy, TN 37379			Facility Location:	SEQUOYAH ACCESS ROAD SODDY DAISY, TN 37379											
Permitted Feature:	107 Internal Outfall			Discharge:	107-G (no description)															
Report Dates & Status																				
Monitoring Period:	From 09/01/21 to 09/30/21			DMR Due Date:	10/15/21			Status:	NetDMR Validated											
Considerations for Form Completion																				
Metal Cleaning Waste Pond discharge. No monitoring required for stormwater decanting. Daily monitoring required only during dewatering events.																				
Principal Executive Officer																				
First Name:	Thomas			Title:	Vice President			Telephone:	423-843-7001											
Last Name:	Marshall																			
No Data Indicator (NODI)																				
Form NODI:	--																			
Code	Parameter Name	Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration					# of Ex.	Frequency of Analysis	Sample Type		
						Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
00400	pH	IM - Internal Monitoring Point	0	--	Sample Permit Req.						>=	6.0 MINIMUM			<=	9.0 MAXIMUM	12 - SU		01/01 - Daily	GR - GRAB
					Value NODI							C - No Discharge				C - No Discharge				
00530	Solids, total suspended	IM - Internal Monitoring Point	0	--	Sample Permit Req.						<=	30.0 MO AVG			<=	100.0 DAILY MX	19 - mg/L		01/01 - Daily	CP - COMPOS
					Value NODI							C - No Discharge				C - No Discharge				
00556	Oil & Grease	IM - Internal Monitoring Point	0	--	Sample Permit Req.						<=	15.0 MO AVG			<=	20.0 DAILY MX	19 - mg/L		01/01 - Daily	GR - GRAB
					Value NODI							C - No Discharge				C - No Discharge				
01042	Copper, total [as Cu]	IM - Internal Monitoring Point	0	--	Sample Permit Req.						<=	1.0 MO AVG			<=	1.0 DAILY MX	19 - mg/L		01/01 - Daily	CP - COMPOS
					Value NODI							C - No Discharge				C - No Discharge				
01045	Iron, total [as Fe]	IM - Internal Monitoring Point	0	--	Sample Permit Req.						<=	1.0 MO AVG			<=	1.0 DAILY MX	19 - mg/L		01/01 - Daily	CP - COMPOS
					Value NODI							C - No Discharge				C - No Discharge				
Submission Note																				
If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.																				
Edit Check Errors																				
No errors.																				
Comments																				
Attachments																				
No attachments.																				
Report Last Saved By																				
Tennessee Valley Authority (TVA)																				
User:	TRMARKUM																			
Name:	Travis Markum																			
E-Mail:	tmarkum@tva.gov																			
Date/Time:	2021-10-06 11:28 (Time Zone: -05:00)																			
Report Last Signed By																				
User:	TMCMUTUA																			
Name:	Tony McMutuary																			
E-Mail:	tmcmutuary@tva.gov																			
Date/Time:	2021-10-07 13:45 (Time Zone: -05:00)																			

**DMR Copy of Record**

<b>Permit</b>		<b>Permittee:</b> Tennessee Valley Authority (TVA)		<b>Facility:</b> TVA SEQUOYAH NUCLEAR PLANT (SQN)	
<b>Permit #:</b> TN0026450	<b>Major:</b> Yes	<b>Permittee Address:</b> Sequoyah Access Road, PO Box 2000 Soddy Daisy, TN 37379	<b>Facility Location:</b> SEQUOYAH ACCESS ROAD SODDY DAISY, TN 37379		
<b>Permitted Feature:</b> 110 External Outfall	<b>Discharge:</b> 110-G (no description)				

<b>Report Dates &amp; Status</b>		<b>DMR Due Date:</b> 10/15/21		<b>Status:</b> NetDMR Validated	
<b>Monitoring Period:</b> From 09/01/21 to 09/30/21					

**Considerations for Form Completion**  
Outfall 110 is closed. Only active in the event the plant goes into closed mode.

<b>Principal Executive Officer</b>		<b>Title:</b> Vice President		<b>Telephone:</b> 423-843-7001	
<b>First Name:</b> Thomas	<b>Last Name:</b> Marshall				

**No Data Indicator (NODI)**  
Form NODI: --

Code	Parameter Name	Monitoring Location	Season #	Param. NODI	Quantity or Loading					Quality or Concentration					# of Ex.	Frequency of Analysis	Sample Type	
					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3				Value 3
00010	Temperature, water deg. centigrade	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI												99/99 - Continuous	CA - CALCTD
00010	Temperature, water deg. centigrade	Z - Instream Monitoring	0	--	Sample Permit Req. Value NODI								<=	30.5 DAILY MX	04 - deg C		99/99 - Continuous	CA - CALCTD
00016	Temp. diff. between samp. & upstrm deg. C	1 - Effluent Gross	1	--	Sample Permit Req. Value NODI								<=	3.0 DAILY MX	04 - deg C		99/99 - Continuous	CA - CALCTD
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI	Req Mon MO AVG		Req Mon DAILY MX	03 - MGD								99/99 - Continuous	RC - Recorder (auto)
50060	Chlorine, total residual	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI					<=	0.027 MO AVG		<=	0.047 DAILY MX	19 - mg/L		05/WK - Five Per Week	GR - GRAB
82234	Temperature rate of change deg. C/hr	Z - Instream Monitoring	0	--	Sample Permit Req. Value NODI								<=	30.5 DAILY MX	62 - deg C/hr		99/99 - Continuous	CA - CALCTD
TRP3B	IC25 Static Renewal 7 Day Chronic Chrcceriodaphnia	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI					>=	69.0 MINIMUM				23 - %		01/30 - Monthly	GR - GRAB
TRP6C	IC25 Static Renewal 7 Day Chronic Chrpimephales	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI					>=	69.0 MINIMUM				23 - %		01/30 - Monthly	GR - GRAB

**Submission Note**  
If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

**Edit Check Errors**  
No errors.

**Comments**

**Attachments**  
No attachments.

**Report Last Saved By**  
Tennessee Valley Authority (TVA)

User: TRMARKUM  
Name: Travis Markum  
E-Mail: trmarkum@tva.gov  
Date/Time: 2021-10-06 11:29 (Time Zone: -05:00)

*Report Last Signed By*

User: TCMUTUA  
Name: Tony McMutuary  
E-Mail: tmcmutuary@tva.gov  
Date/Time: 2021-10-07 13:45 (Time Zone: -05:00)

**DMR Copy of Record**

<b>Permit</b>			
<b>Permit #:</b>	<b>TN0026450</b>	<b>Permittee:</b>	Tennessee Valley Authority (TVA)
<b>Major:</b>	Yes	<b>Permittee Address:</b>	Sequoyah Access Road, PO Box 2000 Soddy Daisy, TN 37379
<b>Permitted Feature:</b>	118 External Outfall	<b>Discharge:</b>	<b>118-G</b> (no description)
<b>Facility:</b>	TVA SEQUOYAH NUCLEAR PLANT (SQN)		
<b>Facility Location:</b>	SEQUOYAH ACCESS ROAD SODDY DAISY, TN 37379		

<b>Report Dates &amp; Status</b>			
<b>Monitoring Period:</b>	<b>From 09/01/21 to 09/30/21</b>	<b>DMR Due Date:</b>	<b>10/15/21</b>
<b>Status:</b>	<b>NetDMR Validated</b>		

<b>Considerations for Form Completion</b>			
---	--	--	--

<b>Principal Executive Officer</b>			
<b>First Name:</b>	Thomas	<b>Title:</b>	Vice President
<b>Last Name:</b>	Marshall	<b>Telephone:</b>	423-843-7001

<b>No Data Indicator (NODI)</b>			
<b>Form NODI:</b>	--		

Code	Parameter Name	Monitoring Location	Season #	Param. NODI	Quantity or Loading					Quality or Concentration					# of Ex.	Frequency of Analysis	Sample Type	
					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3				Value 3
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	--	Sample													
					Permit Req.						>=	2.0 MINIMUM				19 - mg/L	02/07 - Twice Every Week	GR - GRAB
					Value NODI							C - No Discharge						
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample													
					Permit Req.							<=	100.0 DAILY MX		19 - mg/L	02/07 - Twice Every Week	GR - GRAB	
					Value NODI								C - No Discharge					
00545	Solids, settleable	1 - Effluent Gross	0	--	Sample													
					Permit Req.							<=	1.0 DAILY MX		25 - mL/L	01/30 - Monthly	GR - GRAB	
					Value NODI								C - No Discharge					
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample													
					Permit Req.		Req Mon MO AVG		Req Mon DAILY MX	03 - MGD						01/BA - Once Per Batch	ES - ESTIMA	
					Value NODI		C - No Discharge		C - No Discharge									

**Submission Note**  
 If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

**Edit Check Errors**  
 No errors.

**Comments**

**Attachments**  
 No attachments.

**Report Last Saved By**  
 Tennessee Valley Authority (TVA)

User: TRMARKUM  
 Name: Travis Markum  
 E-Mail: trmarkum@tva.gov  
 Date/Time: 2021-10-06 11:29 (Time Zone: -05:00)

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User: TMCMUTUA  
 Name: Tony McMutuary  
 E-Mail: tmcmutuary@tva.gov  
 Date/Time: 2021-10-07 13:45 (Time Zone: -05:00)