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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>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> 101 External Outfall	<b>Discharge:</b> 101-G (no description)				

<b>Report Dates &amp; Status</b>		<b>Monitoring Period:</b> From 09/01/21 to 09/30/21	<b>DMR Due Date:</b> 10/15/21	<b>Status:</b> NetDMR Validated
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**Considerations for Form Completion**  
Primary discharge from Diffuser Pond.

<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	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			19 - mg/L	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.																01/30 - Monthly	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.																01/30 - Monthly	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		Monitoring Location	Season #	Param. NODI	Quantity or Loading					Quality or Concentration						# of Ex.	Frequency of Analysis	Sample Type								
	Name					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			01/30 - Monthly	GR - GRAB					
						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	01/30 - Monthly			GR - GRAB					
						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	01/30 - Monthly			GR - GRAB					
						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>Monitoring Period:</b> From 09/01/21 to 09/30/21		<b>DMR Due Date:</b> 10/15/21		<b>Status:</b> NetDMR Validated	
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**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:	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>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>		

**Considerations for Form Completion**

<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
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														
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														
00545	Solids, settleable	1 - Effluent Gross	0	--	Sample														
					Permit Req.										<=	1.0 DAILY MX	25 - mL/L	01/30 - Monthly	GR - GRAB
					Value NODI														
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									
					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)