



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

July 20, 2021

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

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

Attached is the June 2021 DMR for Sequoyah Nuclear Plant.

Respectfully,

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

Travis R. Markum
Environmental Scientist

DMR Copy of Record

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

Report Dates & Status			
Monitoring Period:	From 06/01/21 to 06/30/21	DMR Due Date:	07/15/21
Status:	NetDMR Validated		

Considerations for Form Completion
Primary discharge from Diffuser Pond.

Principal Executive Officer			
First Name:	Thomas	Title:	Vice President
Last Name:	Marshall	Telephone:	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								=	40.4		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								=	28.7		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								=	2.7		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	=	1756.2	=	1774.0	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			=	0.4	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.																
					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.																
					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. Toxicity samples collected June 6-11, 2021 from 101 resulted in no toxic effects to fathead minnows or daphnids. The resulting IC25 values for both species were >100 percent.

Attachments

Name	Type	Size
SQN_June_2021_WET_Biomonitoring_Report.pdf	pdf	13170752.0

Report Last Saved By

Tennessee Valley Authority (TVA)

User: TRMARKUM
Name: Travis Markum
E-Mail: trmarkum@tva.gov
Date/Time: 2021-07-13 12:51 (Time Zone: -05:00)

Report Last Signed By

User: TMCMUTUA
Name: Tony McMutuary
E-Mail: tmcmutuary@tva.gov
Date/Time: 2021-07-14 07:55 (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 06/01/21 to 06/30/21	DMR Due Date:	07/15/21	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						=	7.7			=	7.7	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									=	6.7	=	6.7	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	=	1.101	=	1.101	03 - MGD									01/30 - Monthly	IN - INSTAN
					Permit Req.		Req Mon MO AVG		Req Mon DAILY MX	03 - MGD										
					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:	2021-07-13 12:53 (Time Zone: -05:00)																			
Report Last Signed By																				
User:	TMCMUTUA																			
Name:	Tony McMutuary																			
E-Mail:	tmcmutuary@tva.gov																			
Date/Time:	2021-07-14 07:55 (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 06/01/21 to 06/30/21				DMR Due Date: 07/15/21				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	Sample Permit Req.	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
00400	pH	IM - Internal Monitoring Point	0	--							>=	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	--							<=	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	--							<=	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	--							<=	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	--							<=	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: 2021-07-13 12:54 (Time Zone: -05:00)																			
Report Last Signed By																			
User: TMCMUTUA		Name: Tony McMutuary				E-Mail: tmcmutuary@tva.gov													
Date/Time: 2021-07-14 07:55 (Time Zone: -05:00)																			

DMR Copy of Record

Permit		Permittee: Tennessee Valley Authority (TVA)		Facility: TVA SEQUOYAH NUCLEAR PLANT (SQN)	
Permit #: TN0026450	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: 110 External Outfall	Discharge: 110-G (no description)				

Report Dates & Status		Monitoring Period: From 06/01/21 to 06/30/21	DMR Due Date: 07/15/21	Status: 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.

Principal Executive Officer		Title: Vice President	Telephone: 423-843-7001
First Name: Thomas	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			
00010	Temperature, water deg. centigrade	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI			Req Mon DAILY MX	04 - deg C							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 Chrcrieriodaphnia	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
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Edit Check Errors
No errors.

Comments

Attachments
No attachments.

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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:	118 External Outfall	Discharge:	118-G (no description)																		
Report Dates & Status																					
Monitoring Period:	From 06/01/21 to 06/30/21							DMR Due Date:	07/15/21							Status:	NetDMR Validated				
Considerations for Form Completion																					
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		
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										01/BA - Once Per Batch	ES - ESTIMA	
Submission Note																					
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