



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

January 11, 2024

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

Subject: **Sequoyah Nuclear Plant, Discharge Monitoring Report (DMR), December 2023**

Attached is the December 2023 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

Pimephales promelas

Value
NODI

9 - Conditional Monitoring - Not
Required This Period

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

No attachments.

Report Last Saved By

Tennessee Valley Authority (TVA)

User: TRMARKUM
Name: Travis Markum
E-Mail: trmarkum@tva.gov
Date/Time: 2024-01-10 14:53 (Time Zone: -06:00)

Report Last Signed By

User: TMCMUTUA
Name: Tony McMutuary
E-Mail: tmcmutuary@tva.gov
Date/Time: 2024-01-11 06:54 (Time Zone: -06:00)

DMR Copy of Record

Permit			
Permit #:	TN0026450	Permittee:	Tennessee Valley Authority (TVA)
Major:	Yes	Permittee Address:	1101 Market Street, BR 2C Chattanooga, TN 37402
Permitted Feature:	103 Internal Outfall	Discharge:	103-G Monthly reporting for IMP 103- Low Volume Waste Treatment Pond
Facility:	TVA SEQUOYAH NUCLEAR PLANT (SQN)		
Facility Location:	SEQUOYAH ACCESS ROAD SODDY DAISY SODDY DAISY, TN 37379		

Report Dates & Status

Monitoring Period:	From 12/01/23 to 12/31/23	DMR Due Date:	01/15/24	Status:	NetDMR Validated
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Considerations for Form Completion

All parameters require data entry. If a limit violation or NODI code is reported, explain in comments. If value is below detection limit, report NODI B and include detection limit in comments.

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
00400	pH	IM - Internal Monitoring Point	0	--	Sample	=	6.8				=	6.8			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	=	2.9				=	2.9		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													
00552	Oil and grease, hexane extr method	IM - Internal Monitoring Point	0	--	Sample	<	4.8				<	4.8		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	=	1.487	=	1.487	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

See Attachment 1 regarding a sewage overflow event to the Turbine Building Sump that occurred during the reporting period.

Attachments

Name	Type	Size
SQN_December_2023_IMP103_DMR_Attachment_1.pdf	pdf	79895.0

Report Last Saved By

Tennessee Valley Authority (TVA)

User: TRMARKUM
 Name: Travis Markum
 E-Mail: trmarkum@tva.gov
 Date/Time: 2024-01-10 14:59 (Time Zone: -06:00)

Report Last Signed By

User: TMCMUTUA
 Name: Tony McMutuary
 E-Mail: tmcmutuary@tva.gov
 Date/Time: 2024-01-11 06:54 (Time Zone: -06:00)

**Attachment 1
TVA Sequoyah Plant
NPDES Permit TN0026450**

Description and Duration of Event

On December 6, 2023 at approximately 1400, SQN plant operations received notification that grey water was leaking out of the Turbine Building sewage holding tank onto the Turbine Building floor, which drains to the Turbine Building Sump (TBS). The TBS flows to the Low Volume Wastewater Treatment Pond (IMP 103) and from there to the Diffuser Pond, which discharges through Outfall 101 to the Tennessee River. Cleanup efforts began as soon as practicable when the leak was isolated.

Earlier that morning, a hold order was established to facilitate maintenance on the sewage ejector pump resulting in the ejector being unavailable. The cause of the overflow was determined to be due not all inflows to the sewage holding tank being isolated prior to the hold order on the ejector pump being issued. This ultimately caused the sewage tank to overflow. A small berm surrounding the sewage tank was able to contain the initial overflow. However, the clearance was lifted and all the inputs were returned to the sewage holding tank prior to the pump being started, which caused the containment berm overflow into the sump.

At no time was there any threat to public drinking supplies, human health, or the environment

Actions Taken to Mitigate Reoccurrence

SQN has documented the event in the TVA Corrective Action Program and is in the process of determining corrective actions to reduce or prevent recurrence. Condition Report (CR) 1896675 has been written to develop corrective actions to help prevent reoccurrence.

DMR Copy of Record

Permit			
Permit #:	TN0026450	Permittee:	Tennessee Valley Authority (TVA)
Major:	Yes	Permittee Address:	1101 Market Street, BR 2C Chattanooga, TN 37402
Permitted Feature:	107 Internal Outfall	Discharge:	107-G Monthly reporting for IMP 107- Metal Cleaning Waste Ponds
Facility:	TVA SEQUOYAH NUCLEAR PLANT (SQN)		
Facility Location:	SEQUOYAH ACCESS ROAD SODDY DAISY SODDY DAISY, TN 37379		

Report Dates & Status

Monitoring Period:	From 12/01/23 to 12/31/23	DMR Due Date:	01/15/24	Status:	NetDMR Validated
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Considerations for Form Completion

All parameters require data entry. If a limit violation or NODI code is reported, explain in comments. If value is below detection limit, report NODI B and include detection limit in comments. If routine decanting of stormwater, report NODI 9.

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
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			
00552	Oil and grease, hexane extr method	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.

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Tennessee Valley Authority (TVA)

User: TRMARKUM
 Name: Travis Markum
 E-Mail: trmarkum@tva.gov
 Date/Time: 2024-01-10 15:00 (Time Zone: -06:00)

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User: TMCMUTUA
 Name: Tony McMutuary
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 Date/Time: 2024-01-11 06:54 (Time Zone: -06:00)

DMR Copy of Record

Permit		Permittee: Tennessee Valley Authority (TVA)		Facility: TVA SEQUOYAH NUCLEAR PLANT (SQN)	
Permit #: TN0026450	Major: Yes	Permittee Address: 1101 Market Street, BR 2C Chattanooga, TN 37402	Facility Location: SEQUOYAH ACCESS ROAD SODDY DAISY SODDY DAISY, TN 37379		
Permitted Feature: 110 External Outfall	Discharge: 110-G Monthly Reporting for Outfall 110				

Report Dates & Status

Monitoring Period: From 12/01/23 to 12/31/23	DMR Due Date: 01/15/24	Status: NetDMR Validated
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Considerations for Form Completion

All parameters require data entry. If outfall is inactive, report NODI C. If a limit violation or NODI code is reported, explain in comments. If value is below detection limit, report NODI B and include detection limit in comments.

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		
00010	Temperature, water deg. centigrade	1 - Effluent Gross	0	--	Sample													99/99 - Continuous	RC - Recorder (auto)		
					Permit Req.												Req Mon DAILY MX			04 - deg C	
					Value NODI															C - No Discharge	
00010	Temperature, water deg. centigrade	Z - Instream Monitoring	0	--	Sample													99/99 - Continuous	CA - CALCTD		
					Permit Req.												<=			30.5 DAILY MX	04 - deg C
					Value NODI															C - No Discharge	
00016	Temp. diff. between samp. & upstrm deg. C	1 - Effluent Gross	2	--	Sample													99/99 - Continuous	CA - CALCTD		
					Permit Req.												<=			5.0 DAILY MX	04 - deg C
					Value NODI															C - No Discharge	
39516	Polychlorinated biphenyls [PCBs]	1 - Effluent Gross	0	--	Sample													01/EP - Once Every Permit Cycle	GR - GRAB		
					Permit Req.												<=			0.0 DAILY MX	20 - ppm
					Value NODI															C - No Discharge	
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample													99/99 - Continuous	RC - Recorder (auto)		
					Permit Req.		Req Mon MO AVG		Req Mon DAILY MX		03 - MGD										
					Value NODI		C - No Discharge		C - No Discharge												
50060	Chlorine, total residual	1 - Effluent Gross	0	--	Sample													01/07 - Weekly	GR - GRAB		
					Permit Req.				<=	0.027 MO AVG		<=	0.047 DAILY MX		19 - mg/L						
					Value NODI		C - No Discharge		C - No Discharge								C - No Discharge				
82234	Temperature rate of change deg. C/hr	Z - Instream Monitoring	0	--	Sample													99/99 - Continuous	CA - CALCTD		
					Permit Req.			<=	2.0 DAILY MX		62 - deg C/hr										
					Value NODI		C - No Discharge		C - No Discharge												
T7P3B	IC25 Sub-Lethal Static Renewal 7 Day Chronic Ceriodaphnia dubia	1 - Effluent Gross	0	--	Sample													01/30 - Monthly	CP - COMPOS		
					Permit Req.				>	69.0 MINIMUM						23 - %					
					Value NODI		C - No Discharge		C - No Discharge												
T7P6C	IC25 Sub-Lethal Static Renewal 7 Day Chronic Pimephales promelas	1 - Effluent Gross	0	--	Sample													01/30 - Monthly	CP - COMPOS		
					Permit Req.				>	69.0 MINIMUM						23 - %					
					Value NODI		C - No Discharge		C - No Discharge												

Value
NODI

C - No
Discharge

Submission Note

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Edit Check Errors

No errors.

Comments

Attachments

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Permit #:	TN0026450	Permittee:	Tennessee Valley Authority (TVA)							Facility:	TVA SEQUOYAH NUCLEAR PLANT (SQN)											
Major:	Yes	Permittee Address:	1101 Market Street, BR 2C Chattanooga, TN 37402							Facility Location:	SEQUOYAH ACCESS ROAD SODDY DAISY SODDY DAISY, TN 37379											
Permitted Feature:	118 External Outfall	Discharge:	118-G Monthly Reporting for Internal Outfall 118																			
Report Dates & Status																						
Monitoring Period:	From 12/01/23 to 12/31/23							DMR Due Date:	01/15/24							Status:	NetDMR Validated					
Considerations for Form Completion																						
All parameters require data entry. If pond is not in service, report NODI 9. If a limit violation or NODI code is reported, explain in comments. If value is below detection limit, report NODI B and include detection limit in comments.																						
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						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.																						
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