TENNESSEE VALLEY AUTHORITY

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

February 15, 2023

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

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

Attached is the January 2023 DMR for Sequoyah Nuclear Plant.

Respectfully,

Travis R. Markum
Environmental Scientist

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 SODDY DAISY, TN 37379
Permitted Feature:	101 External Outfall	**Discharge:**	**101-G** (no description)		
Report Dates & Status					
Monitoring Period:	**From 01/01/23 to 01/31/23**	**DMR Due Date:**	**02/15/23**	**Status:**	**NetDMR Validated**
Considerations for Form Completion					
Primary discharge from Diffuser Pond.					
Principal Executive Officer					
First Name:	Thomas	**Title:**	Vice President	**Telephone:**	423-843-7001
Last Name:	Marshall				
No Data Indicator (NODI)					
Form NODI:	--				

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration						# of Ex.	Frequency of Analysis	Sample Type
Code	Name					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										=	24.7	04 - deg C		99/99 - Continuous	RC - Recorder (auto)
					Permit Req.											Req Mon DAILY MX	04 - deg C		99/99 - Continuous	RC - Recorder (auto)
					Value NODI															
00010	**Temperature, water deg. centigrade**	Z - Instream Monitoring	0	--	Sample										=	10.6	04 - deg C		99/99 - Continuous	CA - CALCTD
					Permit Req.										<=	30.5 DAILY MX	04 - deg C		99/99 - Continuous	CA - CALCTD
					Value NODI															
00016	**Temp. diff. between samp. & upstrm deg. C**	1 - Effluent Gross	1	--	Sample															
					Permit Req.										<=	3.0 DAILY MX	04 - deg C		99/99 - Continuous	CA - CALCTD
					Value NODI											9 - Conditional Monitoring - Not Required This Period				
00016	**Temp. diff. between samp. & upstrm deg. C**	1 - Effluent Gross	2	--	Sample										=	1.7	04 - deg C		99/99 - Continuous	CA - CALCTD
					Permit Req.										<=	5.0 DAILY MX	04 - deg C		99/99 - Continuous	CA - CALCTD
					Value NODI															
50050	**Flow, in conduit or thru treatment plant**	1 - Effluent Gross	0	--	Sample	=	1736.2	=	1754.9	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															
					Permit Req.						<=	0.027 MO AVG			<=	0.047 DAILY MX	19 - mg/L		01/07 - Weekly	GR - GRAB
					Value NODI							B - Below Detection Limit/No Detection				B - Below Detection Limit/No Detection				
82234	**Temperature rate of change deg. C/hr**	Z - Instream Monitoring	0	--	Sample			=	0.1	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															
					Permit Req.						>	69.0 MINIMUM					23 - %		01/30 - Monthly	CP - COMPOS
					Value NODI							9 - Conditional Monitoring - Not Required This Period								
TRP6C	**IC25 Static Renewal 7 Day Chronic Chrpimephales**	1 - Effluent Gross	0	--	Sample															
					Permit Req.						>	69.0 MINIMUM					23 - %		01/30 - Monthly	CP - COMPOS
					Value							9 - Conditional Monitoring - Not Required								

					NODI						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:	2023-02-13 10:40 (Time Zone: -06:00)

Report Last Signed By

User:	TMCMUTUA
Name:	Tony McMutuary
E-Mail:	tmcmutuary@tva.gov
Date/Time:	2023-02-14 13:09 (Time Zone: -06:00)

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 SODDY DAISY, TN 37379
Permitted Feature:	103 Internal Outfall	**Discharge:**	**103-G** (no description)		
Report Dates & Status					
Monitoring Period:	**From 01/01/23 to 01/31/23**	**DMR Due Date:**	**02/15/23**	**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:	--				

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	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						=	6.6			=	6.6	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								=	8.1	=	8.1	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	=	1.255	=	1.255	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:	2023-02-13 10:42 (Time Zone: -06:00)

Report Last Signed By

User:	TMCMUTUA
Name:	Tony McMutuary
E-Mail:	tmcmutuary@tva.gov
Date/Time:	2023-02-14 13:09 (Time Zone: -06:00)

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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 SODDY DAISY, TN 37379
Permitted Feature:	107 Internal Outfall	**Discharge:**	**107-G** (no description)		
Report Dates & Status					
Monitoring Period:	**From 01/01/23 to 01/31/23**	**DMR Due Date:**	**02/15/23**	**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:	--				

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration						# of Ex.	Frequency of Analysis	Sample Type
Code	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															
					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

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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 SODDY DAISY, TN 37379
Permitted Feature:	110 External Outfall	**Discharge:**	**110-G** (no description)		
Report Dates & Status					
Monitoring Period:	**From 01/01/23 to 01/31/23**	**DMR Due Date:**	**02/15/23**	**Status:**	**NetDMR Validated**
Considerations for Form Completion					
Outfall 110 is closed. Only active in the event the plant goes into closed mode.					
Principal Executive Officer					
First Name:	Thomas	**Title:**	Vice President	**Telephone:**	423-843-7001
Last Name:	Marshall				
No Data Indicator (NODI)					
Form NODI:	--				

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration						# of Ex.	Frequency of Analysis	Sample Type
Code	Name					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															
					Permit Req.				Req Mon DAILY MX	04 - deg C									99/99 - Continuous	CA - CALCTD
					Value NODI				C - No Discharge											
00010	**Temperature, water deg. centigrade**	Z - Instream Monitoring	0	--	Sample															
					Permit Req.										<=	30.5 DAILY MX	04 - deg C		99/99 - Continuous	CA - CALCTD
					Value NODI											C - No Discharge				
00016	**Temp. diff. between samp. & upstrm deg. C**	1 - Effluent Gross	2	--	Sample															
					Permit Req.										<=	5.0 DAILY MX	04 - deg C		99/99 - Continuous	CA - CALCTD
					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									99/99 - Continuous	RC - Recorder (auto)
					Value NODI		C - No Discharge		C - No Discharge											
50060	**Chlorine, total residual**	1 - Effluent Gross	0	--	Sample															
					Permit Req.						<=	0.027 MO AVG			<=	0.047 DAILY MX	19 - mg/L		05/WK - Five Per Week	GR - GRAB
					Value NODI							C - No Discharge				C - No Discharge				
82234	**Temperature rate of change deg. C/hr**	Z - Instream Monitoring	0	--	Sample															
					Permit Req.										<=	30.5 DAILY MX	62 - deg C/hr		99/99 - Continuous	CA - CALCTD
					Value NODI											C - No Discharge				
TRP3B	**IC25 Static Renewal 7 Day Chronic Chrceriodaphnia**	1 - Effluent Gross	0	--	Sample															
					Permit Req.						>=	69.0 MINIMUM					23 - %		01/30 - Monthly	GR - GRAB
					Value NODI							C - No Discharge								
TRP6C	**IC25 Static Renewal 7 Day Chronic Chrpimephales**	1 - Effluent Gross	0	--	Sample															
					Permit Req.						>=	69.0 MINIMUM					23 - %		01/30 - Monthly	GR - GRAB
					Value NODI							C - No Discharge								

Submission Note

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Edit Check Errors

No errors.

Comments

Attachments

No attachments.

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User:	TRMARKUM
Name:	Travis Markum
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Date/Time:	2023-02-13 10:43 (Time Zone: -06:00)
Report Last Signed By	
User:	TMCMUTUA
Name:	Tony McMutuary
E-Mail:	tmcmutuary@tva.gov
Date/Time:	2023-02-14 13:09 (Time Zone: -06:00)

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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 SODDY DAISY, TN 37379
Permitted Feature:	118 External Outfall	**Discharge:**	**118-G** (no description)		
Report Dates & Status					
Monitoring Period:	**From 01/01/23 to 01/31/23**	**DMR Due Date:**	**02/15/23**	**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:	--				

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration						# of Ex.	Frequency of Analysis	Sample Type
Code	Name					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

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Edit Check Errors

No errors.

Comments

Attachments

No attachments.

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User:	TRMARKUM
Name:	Travis Markum
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