



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), September 2023**

Attached is the September 2023 DMR for Sequoyah Nuclear Plant.

Respectfully,

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

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: 1101 Market Street, BR 2C Chattanooga, TN 37402		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 09/01/23 to 09/30/23	DMR Due Date: 10/15/23	Status:	NetDMR Validated

Considerations for Form Completion
Primary discharge from Diffuser Pond.

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				Value 3	Units									
00010	Temperature, water deg. centigrade	1 - Effluent Gross	0	--	Sample								=	42.0		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								=	29.4		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								=	2.1		04 - deg C	99/99 - Continuous	CA - CALCTD										
					Permit Req.																<=	3.0 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	=	1771.8	=	1782.8	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			=	0.0	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 Ceriodaphnia dubia	1 - Effluent Gross	0	--	Sample								>	100.0				01/30 - Monthly	CP - COMPOS									
					Permit Req.																		>	69.0 MINIMUM	23 - %	01/30 - Monthly	CP - COMPOS	
					Value NODI																							
TRP6C	IC25 Static Renewal 7 Day Chronic Chrpimephales	1 - Effluent Gross	0	--	Sample								>	100.0				01/30 - Monthly	CP - COMPOS									
					Permit Req.																			>	69.0 MINIMUM	23 - %	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_101_Sep_2023_WET_Compliance_Report.pdf	pdf	7570865.0

Report Last Saved By

Tennessee Valley Authority (TVA)

User: TRMARKUM
Name: Travis Markum
E-Mail: trmarkum@tva.gov
Date/Time: 2023-10-10 13:16 (Time Zone: -05:00)

Report Last Signed By

User: TMCMUTUA
Name: Tony McMutuary
E-Mail: tmcmutuary@tva.gov
Date/Time: 2023-10-12 05:50 (Time Zone: -05:00)

**TENNESSEE VALLEY AUTHORITY
TOXICITY TEST REPORT**

INTRODUCTION / EXECUTIVE SUMMARY

Report Date: September 27, 2023

1. Facility / Discharger: Sequoyah Nuclear Plant / TVA
2. County / State: Hamilton / Tennessee
3. NPDES Permit #: TN0026450
4. Type of Facility: Nuclear-Fueled Electric Generating Plant
5. Design Flow (MGD): 1,579
6. Receiving Stream: Tennessee River (TRM 483.6)
7. 1Q10: 2,456
8. Outfall Tested: 101
9. Dates Sampled: September 10 – 15, 2023
10. Average Flow on Days Sampled (MGD): 1764.032, 1766.694, 1763.495
11. Pertinent Site Conditions: Production / operation data will be provided upon request.
12. Test Dates: September 12 – 19, 2023
13. Test Type: Short-term Chronic Definitive
14. Test Species: Fathead Minnows (*Pimephales promelas*)
Daphnids (*Ceriodaphnia dubia*)
15. Concentrations Tested (%):
Pimephales promelas: UV treated Outfall 101: 17.25, 34.5, 69, 84.5, 100
UV treated Intake: 100

Ceriodaphnia dubia: Non-treated Outfall 101: 17.25, 34.5, 69, 84.5, 100
Non-treated Intake: 100
16. Permit Limit Endpoint (%): Outfall 101: IC₂₅ = 69%



17. Test Results: Outfall 101: *Pimephales promelas*: IC₂₅ > 100%
Ceriodaphnia dubia: IC₂₅ > 100%
18. Facility Contact: Travis Markum Phone #: (865) 748-3294
19. Consulting / Testing Lab: Environmental Testing Solutions, Inc.
20. Lab Contact: Jim Sumner Phone #: (828) 350-9364
21. TVA Contact: Rick Sherrard Phone #: (423) 987-2250
22. Notes: Exposures to samples collected September 10 – 15, 2023 from Outfall 101 resulted in no toxic effects to fathead minnows or daphnids. The resulting IC₂₅ values, for both species, were >100 percent. Exposure of minnows and daphnids to intake samples resulted in no significant differences from the controls during this study period.

METHODS SUMMARY

Samples:

1. Sampling Point: Outfall 101, Intake
2. Sample Type: Composite
3. Sample Information:

Sample ID	Date (MM-DD-YY) Time (ET) Collected	Date (MM-DD-YY) Time (ET) Received	Arrival Temp. (°C)	Initial TRC* (mg/L)	Date (MM-DD-YY) Time (ET) Last Used By
101	09-10-23 / 0700 to 09-11-23 / 0600	09-11-23 / 1336	1.7	<0.10	09-12-23 / 0817 09-13-23 / 0753
Intake	09-10-23 / 0700 to 09-11-23 / 0600	09-11-23 / 1336	1.5	<0.10	09-12-23 / 0817 09-13-23 / 0753
101	09-12-23 / 0700 to 09-13-23 / 0600	09-13-23 / 1315	1.7	<0.10	09-14-23 / 0757 09-15-23 / 0755
Intake	09-12-23 / 0700 to 09-13-23 / 0600	09-13-23 / 1315	3.5	<0.10	09-14-23 / 0757 09-15-23 / 0755
101	09-14-23 / 0700 to 09-15-23 / 0600	09-15-23 / 1203	2.7, 2.7 [†]	<0.10	09-16-23 / 0853 09-17-23 / 0744 09-18-23 / 0742
Intake	09-14-23 / 0700 to 09-15-23 / 0600	09-15-23 / 1203	2.8	<0.10	09-16-23 / 0853 09-17-23 / 0744 09-18-23 / 0742

*TRC = Total Residual Chlorine

[†]Samples were collected in two 2.5 gallon cubitainers. Temperature was measured in each cubitainer upon arrival.

4. Sample Manipulation: Samples from Outfall 101 and intake were warmed to test temperature (25.0 ± 1.0°C) in a warm water bath.

Aliquots of Outfall 101 and Intake samples were UV-treated through a 40-watt Smart[®] UV Sterilizer (manufactured by Emperor Aquatics, Inc.) for 2 minutes.

Pimephales promelas

Ceriodaphnia dubia

Test Organisms:

- | | | |
|------------|--------------------------|--------------------------|
| 1. Source: | <u>In-house Cultures</u> | <u>In-house Cultures</u> |
| 2. Age: | <u>< 24-hours old</u> | <u>< 24-hours old</u> |

Test Method Summary:

- | | | |
|--------------------------------------|---|--|
| 1. Test Conditions: | <u>Static, Renewal</u> | <u>Static, Renewal</u> |
| 2. Test Duration: | <u>7 days</u> | <u>Until at least 60% of control females have 3 broods</u> |
| 3. Control / Dilution Water: | <u>Moderately Hard Synthetic</u> | <u>Moderately Hard Synthetic</u> |
| 4. Number of Replicates: | <u>4</u> | <u>10</u> |
| 5. Organisms per Replicate: | <u>10</u> | <u>1</u> |
| 6. Test Initiation: (Date/Time): | <u>09-12-23 0736 ET</u> | <u>09-12-23 0817 ET</u> |
| 7. Test Termination: (Date/Time): | <u>09-19-23 0550 ET</u> | <u>09-19-23 0623 ET</u> |
| 8. Test Temperature: Outfall 101: | <u>Mean = 24.7°C</u>
<u>(24.2 – 25.0°C)</u> | <u>Mean = 25.0°C</u>
<u>(24.7 – 25.3°C)</u> |
| 9. Physical / Chemical Measurements: | <u>Alkalinity, hardness, total residual chlorine, and conductivity were measured at the laboratory in each 100% sample. Daily temperatures were measured in one replicate for each test concentration. Pre- and post-exposure test solutions were analyzed daily for pH and dissolved oxygen.</u> | |
| 10. Statistics: | <u>Statistics were performed according to methods prescribed by EPA using ToxCalc version 5.0 statistical software (Tidepool Scientific Software, McKinneyville, CA).</u> | |

TOXICITY TEST RESULTS (see Appendix C for Bench Sheets)

1. Results of a *Pimephales promelas* Chronic/ 7-day Toxicity Test.
 (Genus species) (Type / Duration)

Conducted September 12 – 19, 2023 using effluent from Outfall 101.

Test Solutions (% Effluent)	Percent Surviving (time interval used – days)						
	1	2	3	4	5	6	7
Control, UV-treated	100	100	100	100	100	100	100
17.25%	100	100	100	100	100	100	100
34.5%	100	100	100	100	100	100	100
69%	100	100	100	100	100	100	100
84.5%	100	100	100	100	100	100	100
100.0%	100	100	100	100	100	100	100
Intake	100	100	100	100	100	100	100
Control, Non-treated	100	100	100	100	100	100	100

Test Solutions (% Effluent)	Mean Dry Weight (mg) (replicate number)				
	1	2	3	4	Mean
Control, UV-treated	0.668	0.740	0.724	0.758	0.723
17.25%	0.761	0.827	0.773	0.733	0.764
34.5%	0.769	0.737	0.815	0.742	0.766
69%	0.788	0.868	0.759	0.863	0.820
84.5%	0.885	0.818	0.846	0.762	0.828
100.0%	0.888	0.842	0.700	0.816	0.812
Intake	0.769	0.786	0.826	0.835	0.804
Control, Non-treated	0.894	0.787	0.886	0.745	0.828

IC ₂₅ Value: <u>≥ 100%</u> Permit Limit: <u>69%</u> 95% Confidence Limits: Upper Limit: <u>NA</u> Lower Limit: <u>NA</u>	Calculated TU Estimates: <u>< 1.0 TUC*</u> Permit Limit: <u>1.4 TUC</u>
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*TUa = 100/LC₅₀; TUC = 100/ IC₂₅

TOXICITY TEST RESULTS (see Appendix C for Bench Sheets)

2. Results of a *Ceriodaphnia dubia* Chronic/ 7-day Toxicity Test.
 (Genus species) (Type / Duration)

Conducted September 12 – 19, 2023 using effluent from Outfall 101.

Test Solutions (% Effluent)	Percent Surviving (time interval used – days)						
	1	2	3	4	5	6	7
Control	100	100	100	100	100	100	100
17.25%	100	100	100	100	100	100	100
34.5%	100	100	100	100	100	100	100
69%	100	100	100	100	100	100	100
84.5%	100	100	100	100	100	100	100
100.0%	100	100	100	100	100	100	100

Test Solutions (% Effluent)	Reproduction (#young/female/7 days) Data (replicate number)										
	1	2	3	4	5	6	7	8	9	10	Mean
Control	31	33	33	34	33	31	32	32	33	30	32.2
17.25%	33	38	33	31	33	29	34	36	34	34	33.5
34.5%	34	37	32	36	32	37	37	35	35	32	34.7
69%	32	38	36	35	35	36	38	33	35	37	35.5
84.5%	38	37	37	38	37	33	37	33	32	39	36.1
100.0%	35	36	39	35	39	36	37	36	36	39	36.8

IC ₂₅ Value: <u>> 100%</u> Permit Limit: <u>69%</u> 95% Confidence Limits: Upper Limit: <u>NA</u> Lower Limit: <u>NA</u>	Calculated TU Estimates: <u>< 1.0 TUc*</u> Permit Limit: <u>1.4 TUc</u>
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*TUa = 100/LC₅₀; TUc = 100/ IC₂₅

TOXICITY TEST RESULTS (see Appendix C for Bench Sheets)

2. Results of a *Ceriodaphnia dubia* Chronic/ 7-day Toxicity Test.
 (Genus species) (Type / Duration)

Conducted September 12 – 19, 2023 using water from Intake

Test Solutions (% Effluent)	Percent Surviving (time interval used – days)						
	1	2	3	4	5	6	7
Control	100	100	100	100	100	100	100
Intake	100	100	100	100	100	100	100

Test Solutions (% Effluent)	Reproduction (#young/female/7 days) Data (replicate number)										
	1	2	3	4	5	6	7	8	9	10	Mean
Control	33	28	32	31	28	33	31	31	31	29	30.7
Intake	33	31	39	31	31	33	37	34	30	33	33.2
IC ₂₅ Value: <u>≥ 100%</u> Permit Limit: <u>N/A</u> 95% Confidence Limits: Upper Limit: <u>NA</u> Lower Limit: <u>NA</u>						Calculated TU Estimates: <u>≤ 1.0 TUC*</u> Permit Limit: <u>N/A</u>					

*TUa = 100/LC₅₀; TUC = 100/ IC₂₅

REFERENCE TOXICANT TEST RESULTS (see Appendix A and D)

Species	Date	Time	Duration	Toxicant	Results (IC ₂₅)
<i>Pimephales promelas</i>	September 12 – 19, 2023	0715	7 days	KCl	0.61 g/L
<i>Ceriodaphnia dubia</i>	September 12 – 19, 2023	0805	7 days	NaCl	1.08 g/L

PHYSICAL/CHEMICAL SUMMARY

Water Chemistry Mean Values and Ranges for UV-treated *Pimephales promelas* and Non-treated *Ceriodaphnia dubia*, Sequoyah Nuclear Plant (SQN), Effluent Outfall 101 and Intake performed September 12-19, 2023.

Test	Sample ID	Temperature (°C)		Dissolved Oxygen (mg/L)		pH (S.U.)		Conductance (µmhos/cm)	Alkalinity (mg/L CaCO ₃)	Hardness (mg/L CaCO ₃)	*Total Residual Chlorine (mg/L)
		Initial	Final	Initial	Final	Initial	Final				
<i>Pimephales promelas</i>	Control, Non-treated	24.7	24.5	7.8	7.0	7.83	7.61	301	61	86	-
		24.6 - 24.8	24.3 - 24.6	7.7 - 8.0	5.3 - 7.9	7.78 - 7.95	7.19 - 7.79	288 - 313	60 - 62	85 - 87	-
	Control, UV-treated	24.7	24.5	7.8	7.2	7.78	7.64	305	62	88	-
		24.7 - 24.8	24.3 - 24.7	7.6 - 8.0	5.8 - 7.9	7.70 - 7.91	7.26 - 7.78	288 - 317	59 - 63	87 - 89	-
	17.25%	24.8	24.6	7.8	7.1	7.80	7.60	280	-	-	-
		24.7 - 24.9	24.2 - 24.8	7.7 - 8.0	5.7 - 7.8	7.73 - 7.92	7.23 - 7.77	264 - 293	-	-	-
	34.5%	24.8	24.6	7.8	7.1	7.80	7.59	254	-	-	-
		24.7 - 24.9	24.4 - 24.7	7.7 - 8.0	5.6 - 7.8	7.73 - 7.92	7.23 - 7.76	240 - 264	-	-	-
	69%	24.9	24.5	7.9	7.0	7.79	7.57	206	-	-	-
		24.7 - 25.0	24.3 - 24.7	7.7 - 8.0	5.6 - 7.8	7.73 - 7.91	7.23 - 7.72	196 - 215	-	-	-
84.5%	24.9	24.6	7.9	7.0	7.78	7.57	194	-	-	-	
	24.7 - 25.0	24.3 - 24.7	7.8 - 8.0	5.6 - 7.8	7.73 - 7.89	7.26 - 7.75	172 - 283	-	-	-	
100%	24.9	24.5	7.9	7.0	7.78	7.56	155	60	60	<0.10	
	24.8 - 25.0	24.3 - 24.7	7.7 - 8.0	5.2 - 7.9	7.72 - 7.89	7.22 - 7.76	148 - 159	58 - 62	59 - 61	<0.10	
Intake	25.0	24.6	8.0	7.0	7.78	7.55	153	61	59	<0.10	
	24.8 - 25.0	24.4 - 24.7	7.8 - 8.1	5.6 - 8.0	7.71 - 7.89	7.13 - 7.79	146 - 160	58 - 62	59 - 59	<0.10	
Control, Non-treated	24.8	25.1	7.8	7.9	7.83	7.90	301	61	86	-	
	24.7 - 24.9	25.0 - 25.3	7.7 - 8.0	7.8 - 8.0	7.78 - 7.95	7.79 - 8.00	288 - 313	60 - 62	85 - 87	-	
17.25%	24.8	25.0	7.8	7.9	7.88	7.90	280	-	-	-	
	24.7 - 25.0	24.8 - 25.3	7.6 - 8.0	7.7 - 8.0	7.82 - 7.98	7.79 - 7.97	269 - 290	-	-	-	
34.5%	24.9	25.0	7.8	7.9	7.88	7.89	254	-	-	-	
	24.8 - 25.0	24.9 - 25.2	7.6 - 8.0	7.7 - 8.1	7.81 - 7.98	7.78 - 7.96	246 - 264	-	-	-	
69%	24.9	25.1	7.8	7.9	7.86	7.87	206	-	-	-	
	24.8 - 25.0	24.9 - 25.2	7.7 - 8.0	7.7 - 8.0	7.79 - 7.96	7.76 - 7.95	201 - 212	-	-	-	
84.5%	24.9	24.9	7.8	7.9	7.85	7.86	180	-	-	-	
	24.8 - 25.0	24.7 - 25.2	7.7 - 8.0	7.7 - 8.1	7.77 - 7.93	7.74 - 7.93	169 - 187	-	-	-	
100%	25.0	25.0	7.9	7.9	7.83	7.85	155	59	60	<0.10	
	24.9 - 25.0	24.8 - 25.2	7.8 - 8.0	7.7 - 8.1	7.76 - 7.91	7.74 - 7.93	149 - 161	58 - 62	59 - 61	<0.10	
Intake	25.0	25.0	7.9	7.9	7.83	7.84	154	59	59	<0.10	
	24.8 - 25.0	24.7 - 25.2	7.8 - 8.1	7.7 - 8.2	7.75 - 7.90	7.74 - 7.91	148 - 157	56 - 60	57 - 61	<0.10	

*Note: Total residual chlorine was performed on non-treated Outfall 101 and Intake samples.

Overall temperature (°C)	Average	Minimum	Maximum
<i>Pimephales promelas</i>	24.7	24.2	25.0
<i>Ceriodaphnia dubia</i>	25.0	24.7	25.3

SUMMARY / CONCLUSIONS

Exposures to samples collected September 10 – 15, 2023 from Outfall 101 resulted in no toxic effects to fathead minnows or daphnids. The resulting IC₂₅ values, for both species, were >100 percent. Exposure of minnows and daphnids to intake samples resulted in no significant differences from the controls during this study period.

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: 103 Internal Outfall	Discharge: 103-G (no description)				
Report Dates & Status					
Monitoring Period: From 09/01/23 to 09/30/23	DMR Due Date: 10/15/23	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: --					

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	=	6.8				=	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						=	12.6			=	12.6	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						<	4.8			<	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	=	0.718	=	0.718	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: tmarkum@tva.gov
Date/Time: 2023-10-10 13:08 (Time Zone: -05:00)

Report Last Signed By

User: TMCMUTUA
Name: Tony McMutuary
E-Mail: tmcmutuary@tva.gov
Date/Time: 2023-10-12 05:50 (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:	1101 Market Street, BR 2C Chattanooga, TN 37402	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 09/01/23 to 09/30/23	DMR Due Date:	10/15/23	Status:	NetDMR Validated
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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
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: 2023-10-10 12:58 (Time Zone: -05:00)

Report Last Signed By

User: TMCMUTUA
 Name: Tony McMutuary
 E-Mail: tmcmutuary@tva.gov
 Date/Time: 2023-10-12 05:50 (Time Zone: -05:00)

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:	110 External Outfall	Discharge:	110-G (no description)
Facility:		Facility Location:	TVA SEQUOYAH NUCLEAR PLANT (SQN) SEQUOYAH ACCESS ROAD SODDY DAISY SODDY DAISY, TN 37379

Report Dates & Status

Monitoring Period:	From 09/01/23 to 09/30/23	DMR Due Date:	10/15/23	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

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
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													
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													
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													
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													
TRP3B	IC25 Static Renewal 7 Day Chronic Ceriodaphnia dubia	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

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: 2023-10-10 13:02 (Time Zone: -05:00)

Report Last Signed By

User: TMCMUTUA
Name: Tony McMutuary
E-Mail: tmcmutuary@tva.gov
Date/Time: 2023-10-12 05:50 (Time Zone: -05:00)

