



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

January 12, 2023

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

Subject: **Sequoyah Nuclear Plant, Discharge Monitoring Report (DMR), November 2022**

Attached is the November 2022 DMR for Sequoyah Nuclear Plant.

Respectfully,

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

Travis R. Markum
Environmental Scientist

DMR Copy of Record

Permit

Permit #:

TN0026450

Major:

Yes

Permittee:

Tennessee Valley Authority (TVA)

Permittee Address:

Sequoyah Access Road, PO Box 2000
Soddy Daisy, TN 37379

Facility:

TVA SEQUOYAH NUCLEAR PLANT (SQN)

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 11/01/22 to 11/30/22

DMR Due Date:

12/15/22

Status:

NetDMR Validated

Considerations for Form Completion

Primary discharge from Diffuser Pond.

Principal Executive Officer

First Name:

Thomas

Last Name:

Marshall

Title:

Vice President

Telephone:

423-843-7001

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										=	31.6	04 - deg C		99/99 - Continuous	RC - Recorder (auto)
					Permit Req.												04 - deg C		99/99 - Continuous	RC - Recorder (auto)
					Value NODI															
00010	Temperature, water deg. centigrade	Z - Instream Monitoring	0	--	Sample										=	19.5	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														99/99 - Continuous	CA - CALCTD
					Permit Req.										<=	3.0 DAILY MX	04 - deg C			
					Value NODI											9 - Conditional Monitoring - Not Required This Period				
00016	Temp. diff. between samp. & upstrm deg. C	1 - Effluent Gross	2	--	Sample										=	2.2	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	=	1277.0	=	1773.4	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			<=	0.047 DAILY MX	19 - mg/L		01/07 - Weekly	GR - GRAB
					Permit Req.															
					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			=	0.3	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						>	69.0 MINIMUM					23 - %		01/30 - Monthly	CP - COMPOS
					Permit Req.															
					Value NODI							9 - Conditional Monitoring - Not Required This Period								
TRP6C	IC25 Static Renewal 7 Day Chronic Chrpimephales	1 - Effluent Gross	0	--	Sample						>	69.0 MINIMUM					23 - %		01/30 - Monthly	CP - COMPOS
					Permit Req.															
					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:										2022-12-14 13:55 (Time Zone: -06:00)									
Report Last Signed By																			
User:										TMCMUTUA									
Name:										Tony McMutuary									
E-Mail:										tmcmutuary@tva.gov									
Date/Time:										2022-12-14 15:37 (Time Zone: -06:00)									

DMR Copy of Record

Permit

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Major:

TN0026450
Yes

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Permittee Address:

Tennessee Valley Authority (TVA)
Sequoyah Access Road, PO Box 2000
Soddy Daisy, TN 37379

Facility:
Facility Location:

TVA SEQUOYAH NUCLEAR PLANT (SQN)
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 11/01/22 to 11/30/22

DMR Due Date:

12/15/22

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:
Last Name:

Thomas
Marshall

Title:

Vice President

Telephone:

423-843-7001

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						=	7.6			=	7.6	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								=	4.6	=	4.8	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	=	2.214	=	2.214	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:

2022-12-14 13:58 (Time Zone: -06:00)

Report Last Signed By

User:

TMCMUTUA

Name:

Tony McMutuary

E-Mail:

tmcmutuary@tva.gov

Date/Time:

2022-12-14 15:37 (Time Zone: -06:00)

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Permit

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Soddy Daisy, TN 37379

Facility:
Facility Location:

TVA SEQUOYAH NUCLEAR PLANT (SQN)
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 11/01/22 to 11/30/22

DMR Due Date:

12/15/22

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:
Last Name:

Thomas
Marshall

Title:

Vice President

Telephone:

423-843-7001

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													01/01 - Daily	GR - GRAB
					Permit Req.					>=	6.0 MINIMUM			<=	9.0 MAXIMUM	12 - SU			
					Value NODI						C - No Discharge				C - No Discharge				
00530	Solids, total suspended	IM - Internal Monitoring Point	0	--	Sample													01/01 - Daily	CP - COMPOS
					Permit Req.					<=	30.0 MO AVG			<=	100.0 DAILY MX	19 - mg/L			
					Value NODI						C - No Discharge				C - No Discharge				
00556	Oil & Grease	IM - Internal Monitoring Point	0	--	Sample													01/01 - Daily	GR - GRAB
					Permit Req.					<=	15.0 MO AVG			<=	20.0 DAILY MX	19 - mg/L			
					Value NODI						C - No Discharge				C - No Discharge				
01042	Copper, total [as Cu]	IM - Internal Monitoring Point	0	--	Sample													01/01 - Daily	CP - COMPOS
					Permit Req.					<=	1.0 MO AVG			<=	1.0 DAILY MX	19 - mg/L			
					Value NODI						C - No Discharge				C - No Discharge				
01045	Iron, total [as Fe]	IM - Internal Monitoring Point	0	--	Sample													01/01 - Daily	CP - COMPOS
					Permit Req.					<=	1.0 MO AVG			<=	1.0 DAILY MX	19 - mg/L			
					Value NODI						C - No Discharge				C - No Discharge				

Submission Note

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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:

2022-12-14 13:59 (Time Zone: -06:00)

Report Last Signed By

User:

TMCMUTUA

Name:

Tony McMutuary

E-Mail:

tmcmutuary@tva.gov

Date/Time:

2022-12-14 15:37 (Time Zone: -06:00)

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Permit

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Major:

TN0026450
Yes

Permittee:
Permittee Address:

Tennessee Valley Authority (TVA)
Sequoyah Access Road, PO Box 2000
Soddy Daisy, TN 37379

Facility:
Facility Location:

TVA SEQUOYAH NUCLEAR PLANT (SQN)
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 11/01/22 to 11/30/22

DMR Due Date:

12/15/22

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:
Last Name:

Thomas
Marshall

Title:

Vice President

Telephone:

423-843-7001

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													99/99 - Continuous	CA - CALCTD	
					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			
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													05/WK - Five Per Week	GR - GRAB	
					Permit Req.						<=	0.027 MO AVG			<=	0.047 DAILY MX	19 - mg/L			
					Value NODI							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.										<=	30.5 DAILY MX	62 - deg C/hr			
					Value NODI												C - No Discharge			
TRP3B	IC25 Static Renewal 7 Day Chronic Chrceriodaphnia	1 - Effluent Gross	0	--	Sample													01/30 - Monthly	GR - GRAB	
					Permit Req.						>=	69.0 MINIMUM					23 - %			
					Value NODI							C - No Discharge								
TRP6C	IC25 Static Renewal 7 Day Chronic Chrpimephales	1 - Effluent Gross	0	--	Sample													01/30 - Monthly	GR - GRAB	
					Permit Req.						>=	69.0 MINIMUM					23 - %			
					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:	2022-12-14 13:59 (Time Zone: -06:00)
<i>Report Last Signed By</i>	
User:	TMCMUTUA
Name:	Tony McMutuary
E-Mail:	tmcmutuary@tva.gov
Date/Time:	2022-12-14 15:37 (Time Zone: -06:00)

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Facility:
Facility Location:

TVA SEQUOYAH NUCLEAR PLANT (SQN)
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 11/01/22 to 11/30/22

DMR Due Date:

12/15/22

Status:

NetDMR Validated

Considerations for Form Completion

Principal Executive Officer

First Name:
Last Name:

Thomas
Marshall

Title:

Vice President

Telephone:

423-843-7001

No Data Indicator (NODI)

Form NODI:

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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														02/07 - Twice Every Week	GR - GRAB
					Permit Req.						>=	2.0 MINIMUM					19 - mg/L			
					Value NODI							C - No Discharge								
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample														02/07 - Twice Every Week	GR - GRAB
					Permit Req.									<=	100.0 DAILY MX		19 - mg/L			
					Value NODI										C - No Discharge					
00545	Solids, settleable	1 - Effluent Gross	0	--	Sample														01/30 - Monthly	GR - GRAB
					Permit Req.									<=	1.0 DAILY MX		25 - mL/L			
					Value NODI										C - No Discharge					
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample														01/BA - Once Per Batch	ES - ESTIMA
					Permit Req.		Req Mon MO AVG		Req Mon DAILY MX	03 - MGD										
					Value NODI		C - No Discharge		C - No Discharge											

Submission Note

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Edit Check Errors

No errors.

Comments

Attachments

No attachments.

Report Last Saved By

Tennessee Valley Authority (TVA)

User:

TRMARKUM

Name:

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trmarkum@tva.gov

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TMCMUTUA

Name:

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E-Mail:

tmcmutuary@tva.gov

Date/Time:

2022-12-14 15:37 (Time Zone: -06:00)