

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

January 13, 2022

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

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

2021

Attached is the December 2021 DMR for Sequoyah Nuclear Plant.

Respectfully,

Travis R. Markum Environmental Scientist

Permit	

TN0026450 Permit #:

Permittee: Tennessee Valley Authority (TVA)

Discharge:

Facility: TVA SEQUOYAH NUCLEAR PLANT (SQN)

Sequoyah Access Road, PO Box 2000 Soddy Daisy, TN 37379 Permittee Address:

SEQUOYAH ACCESS ROAD SODDY DAISY, TN 37379 Facility Location:

Permitted Feature: 101

External Outfall

Yes

101-G (no description)

Report Dates & Status

Major:

**Monitoring Period:** From 12/01/21 to 12/31/21 DMR Due Date: 01/15/22

Status: **NetDMR Validated** 

**Considerations for Form Completion** 

Primary discharge from Diffuser Pond.

**Principal Executive Officer** 

First Name: Marshall **Last Name:** 

Telephone: Title: Vice President 423-843-7001 Thomas

No Data Indicator (NODI)

Form NODI:

Form N	Parameter	Monitoring Location	Seaso	on Param.			Qı	uantity or	Loading				Quality or Con	centratio	n	# of	Frequency of Analysis	Sample Type
Code	Name	, and the second	#	NODI				Qualifie		Units	Qualifier	r Value 1	Qualifier Value	e Qualifie		Units Ex.		
					Sample	1		2			1		2 2		27.4	04 - deg	99/99 - Continuous	RC - Recorder
					Permit											C 04 - deg		(auto) RC - Recorder
00010	Temperature, water deg. centigrade	1 - Effluent Gross	0		Req.										Req Mon DAILY MX	C	99/99 - Continuous	(auto)
					Value NODI													
					Sample									=	14.3	04 - deg C	99/99 - Continuous	CA - CALCTD
00010	Temperature, water deg. centigrade	Z - Instream Monitoring	0		Permit Req.									<=	30.5 DAILY MX	04 - deg C	99/99 - Continuous	CA - CALCTD
					Value													
					NODI Sample													
	Temp. diff. between samp. & upstrm deg.				Permit									<=	3.0 DAILY MX	04 - deg C	99/99 - Continuous	CA - CALCTD
00016	C	1 - Effluent Gross	1		Req.										9 - Conditional Monitoring - Not Required	C		
					NODI										This Period			
					Sample									=	2.6	04 - deg C	99/99 - Continuous	CA - CALCTD
00016	Temp. diff. between samp. & upstrm deg.	1 - Effluent Gross	2		Permit Req.									<=	5.0 DAILY MX	04 - deg C	99/99 - Continuous	CA - CALCTD
					Value NODI													
					Sample													
20516	Polychlorinated biphenyls [PCBs]	1 - Effluent Gross			Permit Req.									<=	0.0 DAILY MX	20 - ppm	01/EP - Once Every Permit Cycle	GR - GRAB
39516	Polychiorinated diplientyls [Pods]	1 - Ellident Gloss	U	-	Value NODI										9 - Conditional Monitoring - Not Required This Period			
					Sample	= 1	743.1	=	1753.6	03 - MGD							99/99 - Continuous	RC - Recorder (auto)
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0		Permit		Req Mon MO	)	Req Mon DAIL	Y 03 - MGD							99/99 - Continuous	RC - Recorder
					Req. Value		wG		IVIA									(auto)
					NODI													
50000	Oblasius Astal assist.	4 55000 10			Sample Permit						<=	0.027 MO AVG		<=	0.047 DAILY MX	19 -	01/07 - Weekly	GR - GRAB
50060	Chlorine, total residual	1 - Effluent Gross	0		Req. Value											mg/L	,	
					NODI					62 dog		B - Below Detection Limit/No Detection			B - Below Detection Limit/No Detection			
					Sample			=	0.2	62 - deg C/hr							99/99 - Continuous	CA - CALCTD
82234	Temperature rate of change deg. C/hr	Z - Instream Monitoring	0		Permit Req.			<=	2.0 DAILY MX	62 - deg C/hr							99/99 - Continuous	CA - CALCTD
					Value NODI													
					Sample													
TRP3B	IC25 Static Renewal 7 Day Chronic	1 - Effluent Gross	0		Permit Req.						>	69.0 MINIMUM				23 - %	01/30 - Monthly	CP - COMPOS
	Chrceriodaphnia				Value NODI							9 - Conditional Monitoring - Not Required This Period						

				Sample									
TDDCC	IC25 Static Renewal 7 Day Chronic Chrpimephales	1 - Effluent Gross		Permit Req.			>	69.0 MINIMUM			23 - %	01/30 - Monthly	CP - COMPO
TRP6C			0	Value NODI				9 - Conditional Monitoring - Not Required This Period					
Submiss	sion Note												
lf a paraı	meter row does not contain any values fo	or the Sample nor Eff	ในent Tradin	, then none	of the following fields	will be submitted f	or that row: Units,	Number of Excursions, Frequency of Analysis,	and Sample Type.				
Edit Che	eck Errors												
No error	5.												
Comme	nts												
Method [	Detection Limit for Total Residual Chlorin	ne is 0.05 mg/L.											
Attachm	ents												
					Name					Туре		Size	
BCTP_Ar	nual_Report_2021.pdf								pdf		66554.0		
Report L	ast Saved By												
Tenness	see Valley Authority (TVA)												
User:		TF	RMARKUM										
Name:		Tr	avis Marku	m									
E-Mail:		trr	markum@tva	.gov									
Date/Tim	ne:	20	)22-01-10 16	:21 (Time	Zone: -06:00)								
Report L	ast Signed By												
User:		TI	MCMUTUA										
Name:		To	ony McMut	ıary									
E-Mail:		tm	ncmutuary@t	va.gov									
Date/Tim	ie:	20	022-01-12 08	:20 (Time	Zone: -06:00)								

Permit

TN0026450 Permit #:

Permittee: Tennessee Valley Authority (TVA)

Yes Major:

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

**Facility Location:** 

TVA SEQUOYAH NUCLEAR PLANT (SQN)

Facility:

SEQUOYAH ACCESS ROAD SODDY DAISY, TN 37379

**Permitted Feature:** 

103 Internal Outfall

Marshall

Discharge:

**Permittee Address:** 

103-G (no description)

Report Dates & Status

**Monitoring Period:** From 12/01/21 to 12/31/21 **DMR Due Date:** 01/15/22

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.

Title:

**Principal Executive Officer** 

First Name: Thomas Vice President

Telephone: 423-843-7001

No Data Indicator (NODI)

Last Name:

Form NODI:

	Parameter	Monitoring Location	Season #	Param. NODI			Qı	uantity or Load	ding				Qual	ity or Concer	ntration			# 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		
					Sample						=	6.9			=	6.9	12 - SU	01/30 - Monthl	y GR - GRAB
00400	рН	IM - Internal Monitoring Point	0		Permit Req						>=	6.0 MINIMUM			<=	9.0 MAXIMUM	12 - SU	01/30 - Monthl	y GR - GRAB
					Value NOD														
					Sample								=	6.0	=	6.0	19 - mg/L	. 01/30 - Monthl	y GR - GRAB
00530	Solids, total suspended	IM - Internal Monitoring Point	0		Permit Req								<=	30.0 MO AVG	S <=	100.0 DAILY MX	19 - mg/L	01/30 - Monthl	y GR - GRAB
00000		ŭ			Value NODI														
			0		Sample								<	5.1	<	5.1	19 - mg/L	. 01/30 - Monthl	y GR - GRAB
00556	Oil & Grease	IM - Internal Monitoring Point			Permit Req								<=	15.0 MO AVG	S <=	20.0 DAILY MX	19 - mg/L	01/30 - Monthl	y GR - GRAB
00000	Oil & Glease	in mona we me ing i em			Value NOD														
					Sample	= 1.	.66	= '	1.66	03 - MGE	)							01/30 - Monthl	y IN - INSTAN
50050	Flow, in conduit or thru treatment plant	IM - Internal Monitoring Point	0		Permit Req	R	teq Mon MO AV	'G	Req Mon DAILY MX	03 - MGE	)							01/30 - Monthl	y IN - INSTAN
22300					Value NOD														

**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 Travis Markum Name: E-Mail: trmarkum@tva.gov

Date/Time: 2022-01-10 16:24 (Time Zone: -06:00)

Report Last Signed By

User: TMCMUTUA Name: Tony McMutuary E-Mail: tmcmutuary@tva.gov

Date/Time: 2022-01-12 08:20 (Time Zone: -06:00)

Permit

Major:

Permit #: TN0026450

Yes

Permittee: Tennessee Valley Authority (TVA)

Permittee Address: Sequoyah Access Road, PO Box 2000

01/15/22

Vice President

Soddy Daisy, TN 37379

Facility Location: SEQUOYAH ACCESS ROAD SODDY DAISY, TN 37379

Facility:

Telephone:

Permitted Feature: 107

Internal Outfall

**107-G** (no description)

Internal O

Monitoring Period: From 12/01/21 to 12/31/21

Status: NetDMR Validated

423-843-7001

TVA SEQUOYAH NUCLEAR PLANT (SQN)

**Considerations for Form Completion** 

Metal Cleaning Waste Pond discharge. No monitoring required for stormwater decanting. Daily monitoring required only during dewatering events.

Title:

Discharge:

**DMR Due Date:** 

**Principal Executive Officer** 

Report Dates & Status

First Name: Thomas

Last Name: Marshall

No Data Indicator (NODI)

Form NODI:

	Parameter	Monitoring Location	Season #	Param. NODI			Quantity	or Loadi	ng			Quality o	r Concentration			# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1 C	Qualifier 2	Value 2 Units	Qualifier 1	Value 1	Qualifier 2	Value 2 Qualifier	Value 3	Units			
					Sample													
00400	pH	IM - Internal Monitoring Point	0		Permit Req.					>=	6.0 MINIMUM		<=	9.0 MAXIMUM	12 - SU		01/01 - Daily	GR - GRAB
		· ·			Value NODI						C - No Discharge			C - No Discharge				
					Sample													
00530	Solids, total suspended	IM - Internal Monitoring Point	0		Permit Req. Value NODI					<=	30.0 MO AVG		<=	100.0 DAILY MX	19 - mg/L		01/01 - Daily	CP - COMPO
	,										C - No Discharge			C - No Discharge				
					Sample													
00556	Oil & Grease	IM - Internal Monitoring Point	0		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				
					Sample					<=								
01042	Copper, total [as Cu]	IM - Internal Monitoring Point	0	,	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				
					Sample													
01045	Iron, total [as Fe]	IM - Internal Monitoring Point	0		Permit Req.					<=	1.0 MO AVG		<=	1.0 DAILY MX	19 - mg/L		01/01 - Daily	CP - COMPOS
01040	non, total [ao i o]	3			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:
 trmarkum@tva.gov

Date/Time: 2022-01-10 16:24 (Time Zone: -06:00)

Report Last Signed By

User: TMCMUTUA

Name: Tony McMutuary

E-Mail: tmcmutuary@tva.gov

Date/Time: 2022-01-12 08:20 (Time Zone: -06:00)

TRP6C IC25 Static Renewal 7 Day Chronic Chrpimephales 1 - Effluent Gross

Permit Facility: Tennessee Valley Authority (TVA) Permit #: TN0026450 Permittee: TVA SEQUOYAH NUCLEAR PLANT (SQN) Sequoyah Access Road, PO Box 2000 SEQUOYAH ACCESS ROAD Major: Yes Permittee Address: **Facility Location:** SODDY DAISY, TN 37379 Soddy Daisy, TN 37379 110 **Permitted Feature:** Discharge: 110-G External Outfall (no description) Report Dates & Status **Monitoring Period:** From 12/01/21 to 12/31/21 **DMR Due Date:** 01/15/22 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** Thomas Telephone: 423-843-7001 **First Name:** Title: Vice President Marshall **Last Name:** No Data Indicator (NODI) Form NODI: Parameter **Monitoring Location** Season **Quantity or Loading Quality or Concentration** Frequency of Analysis Sample Type NODI Qualifier Value 1 Qualifier Value 2 Units Qualifier Qualifier Value Qualifier Units Code Name Value 1 Value 3 Sample **Permit** Req Mon DAILY MX C 04 - deg 99/99 - Continuous CA - CALCTD Req. 00010 Temperature, water deg. centigrade 1 - Effluent Gross 0 C - No Value NODI Discharge Sample **Permit** 30.5 DAILY MX 04 - deg C 99/99 - Continuous CA - CALCTD Z - Instream Req. 00010 Temperature, water deg. centigrade 0 Monitoring C - No Value NODI Discharge Sample Permit <= 5.0 DAILY MX 04 - deg C 99/99 - Continuous CA - CALCTD Req. 2 00016 Temp. diff. between samp. & upstrm deg. C 1 - Effluent Gross C - No /alue NODI Discharge Sample 01/EP - Once Every Permit Permit <= 0.0 DAILY MX 20 - ppm GR - GRAB Reg. Cycle 39516 Polychlorinated biphenyls [PCBs] 1 - Effluent Gross 0 C - No /alue NODI Discharge Sample RC - Recorder **Permit** Req Mon MO AVG Req Mon DAILY MX 03 - MGD 99/99 - Continuous Req. (auto) 1 - Effluent Gross 0 Flow, in conduit or thru treatment plant C - No C - No /alue NODI Discharge Discharge Sample <= 0.027 MO AVG <= 0.047 DAILY MX 19 - mg/L 05/WK - Five Per Week GR - GRAB Req. 50060 Chlorine, total residual 1 - Effluent Gross 0 C - No C - No Value NODI Discharge Discharge Sample **Permit** 62 - deg 30.5 DAILY MX 99/99 - Continuous CA - CALCTD Z - Instream Req. 82234 Temperature rate of change deg. C/hr 0 Monitoring C - No Value NODI Discharge Sample **Permit** 69.0 MINIMUM 23 - % 01/30 - Monthly GR - GRAB IC25 Static Renewal 7 Day Chronic Req. TRP3B 1 - Effluent Gross 0 Chrceriodaphnia C - No Value NODI Discharge Sample

69.0 MINIMUM

C - No

Discharge

23 - %

01/30 - Monthly

GR - GRAB

Permit

Req.

Value NODI

0

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.

No attachments.

Report Last Saved By

Tennessee Valley Authority (TVA)

 User:
 TRMARKUM

 Name:
 Travis Markum

 E-Mail:
 trmarkum@tva.gov

Date/Time: 2022-01-10 16:25 (Time Zone: -06:00)

Report Last Signed By

User: TMCMUTUA

Name: Tony McMutuary

E-Mail: tmcmutuary@tva.gov

Date/Time: 2022-01-12 08:20 (Time Zone: -06:00)

Permit

Major:

TN0026450 Permit #:

Tennessee Valley Authority (TVA) Permittee:

Sequoyah Access Road, PO Box 2000 Soddy Daisy, TN 37379 Permittee Address:

**Facility Location:** 

Facility:

Status:

TVA SEQUOYAH NUCLEAR PLANT (SQN)

SEQUOYAH ACCESS ROAD SODDY DAISY, TN 37379

**Permitted Feature:** 

118 External Outfall

Yes

Discharge:

**DMR Due Date:** 

118-G (no description)

01/15/22

Report Dates & Status

**Monitoring Period:** From 12/01/21 to 12/31/21

**NetDMR Validated** 

**Considerations for Form Completion** 

Principal Executive Officer

No Data Indicator (NODI)

First Name: Thomas Title: Vice President Telephone: 423-843-7001

Last Name: Marshall

Form NODI:

	Parameter	Monitoring Location	Season # Param. NODI			Qua	ntity or Load	ling				Quality of	r Conce	entration			# 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		Qualifier 3	Value 3	Units			
				Sample															
00300	Oxygen, dissolved [DO]	1 - Effluent Gross	0	Permit Req						>=	2.0 MINIMUM					19 - mg/L		02/07 - Twice Every Week	GR - GRAB
		1 Emacin Cross		Value NODI	ı						C - No Discharge								
				Sample															
00530	Solids, total suspended	1 - Effluent Gross	0	Permit Req.										<=	100.0 DAILY MX	19 - mg/L		02/07 - Twice Every Week	GR - GRAB
00000				Value NOD	ı										C - No Discharge				
				Sample															
00545	Solids, settleable	1 - Effluent Gross	0	Permit Req										<=	1.0 DAILY MX	25 - mL/L		01/30 - Monthly	GR - GRAB
00010	Conuc, comount	. Emacin Gross		Value NOD	ı										C - No Discharge				
				Sample															
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	Permit Req		Req Mon MO AVG		Req Mon DAILY MX	03 - MGD	)								01/BA - Once Per Batch	ES - ESTIMA
00000	riow, in conduit or thru treatment plant	. 22311 01000		Value NOD	ı	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: trmarkum@tva.gov

Date/Time: 2022-01-10 16:26 (Time Zone: -06:00)

Report Last Signed By

User: TMCMUTUA Name: Tony McMutuary E-Mail: tmcmutuary@tva.gov

Date/Time: 2022-01-12 08:20 (Time Zone: -06:00)