

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

January 14, 2021

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

Subject:

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

2020

Attached is the December 2020 DMR for Sequoyah Nuclear Plant.

Respectfully,

Travis R. Markum

**Environmental Scientist** 

Permit

Permit #: TN0026450

Permittee:

Tennessee Valley Authority (TVA)

Site Vice President

Facility:

Status:

Telephone:

TVA SEQUOYAH NUCLEAR PLANT (SQN)

Major: Yes

Permittee Address:

Title:

Sequoyah Access Road, PO Box 2000 Facility Location: Soddy Daisy, TN 37379

SEQUOYAH ACCESS ROAD SODDY DAISY, TN 37379

Permitted Feature:

101 External Outfall Discharge: 101-G (no description)

SODDY DAISY, TN 37379

Report Dates & Status

Monitoring Period: From 12/01/20 to 12/31/20

DMR Due Date: 01/15/21

NetDMR Validated

Considerations for Form Completion

Primary discharge from Diffuser Pond.

Principal Executive Officer

First Name: Thomas
Last Name: Marshall

423-843-7001

No Data Indicator (NODI)

Form NODI: --

	Parameter	Monitoring Location		n Param.				antity or L					Quality or						Frequency of Analysis	Sample Type
Code	Name		#	NODI		Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	r Value 1	Qualifier 2	Value 2	Qualifi 3	er Value 3	Units	Ex.		
					Sample										=	28.0	04 - deg C	١	99/99 - Continuous	RC - Recorder (auto)
00010	Temperature, water deg. centigrade	1 - Effluent Gross	0		Permit Req.											Req Mon DAILY MX	04 - deg C	و ا	99/99 - Continuous	RC - Recorder (auto)
					Value NODI															()
					Sample										=	15.0	04 - deg C	١ ,	99/99 - Continuous	CA - CALCTD
00010	Temperature, water deg. centigrade	Z - Instream	0		Permit										<=	30.5 DAILY MX	04 - deg			CA - CALCTD
00010	remperature, water deg. contigrade	Monitoring			Req. Value											00.0 8742.1 1104	С	-	order Committee	0,1 0,12015
					NODI Sample															
	Town diff between come 8 weekens do				Permit										<=	3.0 DAILY MX	04 - deg	و ا	99/99 - Continuous	CA - CALCTD
00016	Temp. diff. between samp. & upstrm deg. C	1 - Effluent Gross	1		Req. Value											9 - Conditional Monitoring - Not Required	C			
					NODI											This Period				
					Sample										=	1.8	04 - deg C	ا (	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	و ا	99/99 - Continuous	CA - CALCTD
					Value NODI															
					Sample															
39516	Polychlorinated biphenyls [PCBs]	1 - Effluent Gross	0		Permit Req.										<=	0.0 DAILY MX	20 - ppm	F	01/EP - Once Every Permit Cycle	GR - GRAB
					Value NODI											9 - Conditional Monitoring - Not Required This Period				
					Sample	= '	1753.5		1762.6	03 - MGD								9		RC - Recorder (auto)
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0		Permit Req.		Req Mon MO AVG		Req Mon DAILY	03 - MGD								9	00/00 - Continuous	RC - Recorder (auto)
					Value NODI	ĺ														(auto)
					Sample															
50060	Chlorine, total residual	1 - Effluent Gross	0		Permit Req.						<=	0.027 MO AVG			<=	0.047 DAILY MX	19 - mg/L	C	01/07 - Weekly	GR - GRAB
					Value NODI							B - Below Detection Limit/No Detection				B - Below Detection Limit/No Detection				
					Sample			=	0.2	62 - deg C/hr								9	99/99 - Continuous	CA - CALCTD
82234	Temperature rate of change deg. C/hr	Z - Instream	0		Permit Req.			<=	2.0 DAILY MX	62 - deg C/hr								9	99/99 - Continuous	CA - CALCTD
	- •	Monitoring			Value					O/III										
					NODI Sample															
TRP3B	IC25 Static Renewal 7 Day Chronic	4 550			Permit Req.						>	69.0 MINIMUM					23 - %		01/30 - Monthly	CP - COMPOS
TRP3B	Chrceriodaphnia	1 - Effluent Gross	U	-	Value NODI							9 - Conditional Monitoring - Not Required This Period								
					NODI															

					Sample								
TRP6C	TRP6C IC25 Static Renewal 7 Day Chronic Chrpimephales	1 - Effluent Gross	0		Permit Req.			:	>	69.0 MINIMUM	23 - %	01/30 - Monthly	CP - COMPOS
00					Value NODI					9 - Conditional Monitoring - Not Required This Period			
Submis	sion Note												
16			T.	and the second second		£-11	 	N4 1	Later N	of Francisco - Francisco of Arabaia and Consula Torra			

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 (MDL) 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: 2021-01-13 09:47 (Time Zone: -06:00)

Report Last Signed By

 User:
 SWHUNNEW

 Name:
 Scott
 Hunnewell

 E-Mail:
 swhunnewell@tva.gov

Date/Time: 2021-01-14 10:33 (Time Zone: -06:00)

Permit

TN0026450 Permit #:

Permittee: Permittee Address: Tennessee Valley Authority (TVA)

**Facility Location:** 

TVA SEQUOYAH NUCLEAR PLANT (SQN)

Major:

Discharge:

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

SEQUOYAH ACCESS ROAD SODDY DAISY, TN 37379

Permitted Feature:

103 Internal Outfall

Yes

103-G (no description)

Site Vice President

Report Dates & Status

Monitoring Period: From 12/01/20 to 12/31/20 DMR Due Date: 01/15/21 Status:

Facility:

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 Last Name: Marshall

423-843-7001 Telephone:

No Data Indicator (NODI)

Form NODI:

FOIIII I																				
	Parameter	Monitoring Location	Season #	# Param. NODI			Qua	antity or Loa	ading				Qual	ity or Conce	ntration			# of Ex. F	requency of Analysi	s 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						=	7.7			=	7.7	12 - SU	0	1/30 - Monthly	GR - GRAB
00400	pH	IM - Internal Monitoring Point	0		Permit Req						>=	6.0 MINIMUM			<=	9.0 MAXIMUM	12 - SU	0.	1/30 - Monthly	GR - GRAB
	ļ	, and the second			Value NOD															
					Sample								=	8.5	=	8.5	19 - mg/L	. 0	1/30 - Monthly	GR - GRAB
00530	Solids, total suspended	IM - Internal Monitoring Point	0		Permit Req								<=	30.0 MO AV	S <=	100.0 DAILY MX	19 - mg/L	. 0·	1/30 - Monthly	GR - GRAB
00000	contrast suspended	Ÿ	-		Value NOD															
					Sample								<	5.0	<	5.0	19 - mg/L	. 0	1/30 - Monthly	GR - GRAB
00556	Oil & Grease	IM - Internal Monitoring Point	0		Permit Req								<=	15.0 MO AV	S <=	20.0 DAILY MX	19 - mg/L	. 0·	1/30 - Monthly	GR - GRAB
00000	S. a S. 3335	M - Internal Monitoring Point			Value NOD															
					Sample	= 1	1.696	=	1.696	03 - MGD	)							0.	1/30 - Monthly	IN - INSTAN
50050	Flow, in conduit or thru treatment plant	IM - Internal Monitoring Point	0		Permit Req	. F	Req Mon MO AVO	3	Req Mon DAILY MX	03 - MGD								0	1/30 - Monthly	IN - INSTAN
00000	rion, in conduit of this document plant	IM - Internal Monitoring Point	U	-	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 Name: Travis Markum E-Mail: trmarkum@tva.gov

Date/Time: 2021-01-13 09:48 (Time Zone: -06:00)

Report Last Signed By

User: SWHUNNEW Name: Scott Hunnewell E-Mail: swhunnewell@tva.gov

Date/Time: 2021-01-14 10:33 (Time Zone: -06:00)

Permit

Permit #: TN0026450
Major: Yes

Permittee:
Permittee Address:

Discharge:

Tennessee Valley Authority (TVA)

Sequoyah Access Road, PO Box 2000 Soddy Daisy, TN 37379 Facility Location:

Facility:

TVA SEQUOYAH NUCLEAR PLANT (SQN)

SEQUOYAH ACCESS ROAD SODDY DAISY, TN 37379

Permitted Feature:

Internal Outfall

107-G

107-G (no description)

Report Dates & Status

Monitoring Period: From 12/01/20 to 12/31/20

DMR Due Date: 01/15/21

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.

Title:

Principal Executive Officer

First Name: Thomas
Last Name: Marshall

Site Vice President

Telephone: 423-843-7001

No Data Indicator (NODI)

Form NODI:

	Parameter	Monitoring Location	Season #	Param. NODI			Quantity or Lo	ading			Quality or Con	centration		#	of Ex. F	requency of Analysis	Sample Typ
Code	Name					Qualifier 1 V	alue 1 Qualifi	er 2 Value 2 Uni	s Qualifier 1	Value 1	Qualifier 2 Value	2 Qualifier 3	Value 3	Units			
					Sample												
00400	На	IM - Internal Monitoring Point	0		Permit Req.				>=	6.0 MINIMUM		<=	9.0 MAXIMUM	12 - SU	0	1/01 - Daily	GR - GRAB
	•	, and the second			Value NODI					C - No Discharge			C - No Discharge				
					Sample												
0530	Solids, total suspended	IM - Internal Monitoring Point	0		Permit Req.				<=	30.0 MO AVG		<=	100.0 DAILY MX	19 - mg/L	0	1/01 - Daily	CP - COMPO
	Comuc, total outpointed	, and the second			Value NODI					C - No Discharge			C - No Discharge				
					Sample												
0556	Oil & Grease	IM - Internal Monitoring Point	0		Permit Req.				<=	15.0 MO AVG		<=	20.0 DAILY MX	19 - mg/L	0	1/01 - 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	0	1/01 - Daily	CP - COMPO
		IN - Internal Worldoning Point			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	0	1/01 - Daily	CP - COMPC
	145 Iron, total [as re]	iivi - internai ivionitoring Point U			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: 2021-01-13 09:48 (Time Zone: -06:00)

Report Last Signed By

 User:
 SWHUNNEW

 Name:
 Scott
 Hunnewell

 E-Mail:
 swhunnewell@tva.gov

Date/Time: 2021-01-14 10:33 (Time Zone: -06:00)

Permit Major:

Permit #: TN0026450

Title:

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

Facility Location:

TVA SEQUOYAH NUCLEAR PLANT (SQN)

SEQUOYAH ACCESS ROAD SODDY DAISY, TN 37379

Permitted Feature: 110

External Outfall

Discharge:

110-G (no description)

Report Dates & Status

Monitoring Period: From 12/01/20 to 12/31/20 DMR Due Date: 01/15/21

Status:

Facility:

NetDMR Validated

Considerations for Form Completion

Outfall 110 is closed. Only active in the event the plant goes into closed mode.

Yes

Principal Executive Officer

First Name: Thomas Last Name:

Marshall

Site Vice President

Telephone:

423-843-7001

No Data Indicator (NODI)

Form NODI:

Code	Name							ntity or Lo						or Conc				# of	Frequency of Analysis	Sample Type
			#	NODI		Qualifier 1	Value 1	Qualifier 2	r Value 2	Units	Qualifier 1	Value 1	Qualifier 2		Qualifier 3	Value 3	Units	Ex.		
					Sample															
00040 -		4 500 10			Permit Req.				Req Mon DAILY MX	04 - deg C									99/99 - Continuous	CA - CALCTD
00010 1	Femperature, water deg. centigrade	1 - Effluent Gross	0	-	Value NODI				C - No											
									Discharge											
					Sample Permit															
00010 T		Z - Instream	0		Req.										<=	30.5 DAILY MX	04 - deg C		99/99 - Continuous	CA - CALCTD
		Monitoring			Value NODI											C - No				
																Discharge				
					Sample Permit															
00016 T	Temp. diff. between samp. & upstrm deg. C	1 - Effluent Gross	2		Req.										<=	5.0 DAILY MX	04 - deg C		99/99 - Continuous	CA - CALCTD
					Value NODI											C - No Discharge				
					Sample											Discharge				
					Permit										<=	0.0 DAILY MX	20 - ppm		01/EP - Once Every Permit	GR - GRAB
39516 P	Polychlorinated biphenyls [PCBs] 1 - Effluent Gros	1 - Effluent Gross	0		Req.										-		zu - ppm		Cycle	GR - GRAD
					Value NODI											C - No Discharge				
					Sample															
50050	Flow, in conduit or thru treatment plant 1 - Effluent Gross	4. 560			Permit Req.		Req Mon MO AVG		Req Mon DAILY MX	03 - MGD									99/99 - Continuous	RC - Recorder (auto)
50050 F		i - Elliuent Gross	0		Value NODI		C - No		C - No											
							Discharge		Discharge											
					Sample Permit															
50060 C	Chlorine, total residual	1 - Effluent Gross	0		Req.						<=	0.027 MO AVG			<=	0.047 DAILY MX	19 - mg/L		05/WK - Five Per Week	GR - GRAB
					Value NODI							C - No				C - No				
												Discharge				Discharge				
					Sample Permit												62 - deg			
82234 <b>T</b>		Z - Instream	0		Req.										<=	30.5 DAILY MX	C/hr		99/99 - Continuous	CA - CALCTD
		Monitoring			Value NODI											C - No Discharge				
					Sample															
(	C25 Static Renewal 7 Day Chronic				Permit Req.						>=	69.0 MINIMUM					23 - %		01/30 - Monthly	GR - GRAB
TRP3B C	Chrceriodaphnia	1 - Effluent Gross	0									C - No								
					Value NODI							Discharge								
					Sample															
TRPSC #	C25 Static Ranawal 7 Day Chronic Chroimophalas	1 - Effluent Gross	0		Permit Req.						>=	69.0 MINIMUM					23 - %		01/30 - Monthly	GR - GRAB
TREOC IC	IC25 Static Renewal 7 Day Chronic Chrpimephales 1 -	i - Lilluelli Gioss			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: 2021-01-13 09:49 (Time Zone: -06:00)

Report Last Signed By

 User:
 SWHUNNEW

 Name:
 Scott Hunnewell

 E-Mail:
 swhunnewell@tva.gov

Date/Time: 2021-01-14 10:33 (Time Zone: -06:00)

Permit

TN0026450 Permit #:

Permittee:

Tennessee Valley Authority (TVA)

Facility: Facility Location: TVA SEQUOYAH NUCLEAR PLANT (SQN)

Major: Yes Permittee Address:

Discharge:

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

SEQUOYAH ACCESS ROAD SODDY DAISY, TN 37379

Permitted Feature:

118 External Outfall 118-G (no description)

Report Dates & Status

Monitoring Period: From 12/01/20 to 12/31/20 DMR Due Date: 01/15/21

Status:

NetDMR Validated

Considerations for Form Completion

Principal Executive Officer

First Name: Last Name:

Thomas Marshall Title: Site Vice President Telephone:

423-843-7001

No Data Indicator (NODI)

Form NODI:

I OIIII I	TODI.																			
	Parameter	Monitoring Location	n Season #	Param. NODI			Qua	intity or Load	ling				Quality of	or Concentra	ation			# of Ex.	Frequency of Analysis	Sample Ty
Code	Name					Qualifier 1	Value 1	Value 1 Qualifier 2 Value 2 Units Qu		Qualifier 1	Value 1	Qualifier 2	Value 2 Qu	alifier 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 - GRA
00000	oxygen, dissolved [50]	1 Emaoni Grood			Value NODI							C - No Discharge								
					Sample															
00530	Solids, total suspended	1 - Effluent Gross	0		Permit Req.									<=	1	100.0 DAILY MX	19 - mg/L	s g/L g/L	02/07 - Twice Every Week	GR - GRA
00330	Johns, total Suspendon	1 Emaoni Grood			Value NODI											C - No Discharge				
					Sample															
00545	Solids, settleable	1 - Effluent Gross	0		Permit Req.									<=		I.0 DAILY MX	19 - mg/L 25 - mL/L		01/30 - Monthly	GR - GRA
00010	Comas, comounts	1 Zilidoni Groco			Value NODI											C - No Discharge				
	Flow, in conduit or thru treatment plant				Sample															
50050		1 - Effluent Gross	0		Permit Req.	R	eq Mon MO AVG		Req Mon DAILY MX	03 - MGD	)								01/BA - Once Per Batch	ES - ESTI
50050			Ü		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: 2021-01-13 09:42 (Time Zone: -06:00)

Report Last Signed By

User: SWHUNNEW Name: Scott Hunnewell E-Mail: swhunnewell@tva.gov

Date/Time: 2021-01-14 10:33 (Time Zone: -06:00)