



Tennessee Valley Authority, Post Office Box 2000, Soddy Daisy, Tennessee 37384-2000

February 1, 2012

State of Tennessee
Department of Environment and Conservation
Division of Water Supply
Compliance Review Section
6th Floor, L & C Tower
401 Church Street
Nashville, Tennessee 37243-1539

To whom it may concern:

**TENNESSEE VALLEY AUTHORITY (TVA) – SEQUOYAH NUCLEAR PLANT (SQN) - NPDES
PERMIT NO. TN0026450 – ANNUAL WATER WITHDRAWAL UPDATE**

In accordance with the provisions of the Tennessee Water Resources Information Act of 2002, T.C.A. 69-7-301 et seq., enclosed are completed Water Withdrawal Registration Forms for SQN for calendar year 2011.

As previously reported, federal agencies are not subject to laws and regulations promulgated by state governments unless Congress has clearly waived the federal government's sovereign immunity. However, TVA has voluntarily agreed as a matter of policy to provide the registration information to assist both TVA and TDEC in carrying out their water management responsibilities. By voluntarily cooperating with the State of Tennessee in its water management programs, TVA does not waive any immunity it may have under the Constitution from State regulation and control, nor manifest any position on who may control or own the water.

If you have any questions or need additional information, please contact Brad Love at (423) 843-6714 or by e-mail bmlove@tva.gov of Sequoyah's environmental staff.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Sincerely,

John T. Carlin
Site Vice President
Sequoyah Nuclear Plant

Enclosures

cc (Enclosures):

Chattanooga Environmental Field Office
Division of Water Pollution Control
State Office Building, Suite 550
540 McCallie Avenue
Chattanooga, Tennessee 37402-2013

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

COOL
NRR



DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF WATER SUPPLY
6th Floor L & C Tower, 401 Church Street
Nashville, Tennessee 37243-1539
(615) 532-0191

WATER WITHDRAWAL REGISTRATION

In accordance with the provisions of Tennessee Code Annotated Section 69-7-301 et seq., the Water Resources Information Act; this registration is required for anyone withdrawing an average of 10,000 gallons or more of water per day.
See attached instructions.

PART A. FACILITY & CONTACT INFORMATION

1. Withdrawal Registration No.: 628 (For Official Use Only)
2. Water User: TVA - Sequoyah Nuclear Plant Type: Thermal Plant (Nuclear)
Mailing Address: P.O. Box 2000 Mailstop OPS-5N-SQN
City: Soddy-Daisy State: Tennessee Zip: 37384
3. Location (if different from mailing address):
Street Address: Sequoyah Access Road
City: Soddy-Daisy State: Tennessee Zip: 37379
4. Number of employees at location: 1148
5. Indicate the contact individual for water withdrawal information:
Name: Bradley Love Title: Environmental Scientist
e-mail: bmllove@tva.gov Phone: 423-843-6714 Fax: 423-843-7428

PART B. WATER USE REPORTING PERIOD

6. Year: 2011
7. (Check One): ☐ New Operation ☒ Renewal
8. List any water problems you have experienced in the last reporting period: N/A
9. Classification of Water Use (Use all that Apply) and Percentage of Total use:

<u>0</u>	%	a) Domestic water use (drinking, human consumption and general sanitation uses)
<u>0</u>	%	b) Institutional or other general uses (lawn watering, laundry)
<u>0</u>	%	c) Irrigation of crops, pastures and nursery stock
<u>0</u>	%	d) livestock watering (includes feed lots, dairy sanitation and fish farming)
<u>0</u>	%	e) navigation (lock usage and flow augmentation for navigation)
<u>100</u>	%	f) thermoelectric power production, including cooling purposes (excludes hydroelectric)
<u>0</u>	%	g) recreational use, park use, golf course irrigation, water park use
<u>0</u>	%	h) industrial uses include manufacturing, food processing, washing, and cooling
<u>0</u>	%	i) hydroelectric power generation (provided none of it is used consumptively)
<u>0</u>	%	j) mining (milling or where water is used to wash or process an ore)
<u>0</u>	%	k) dewatering (mining, quarry rock production, other operations where water is withdrawn)
<u>0</u>	%	l) any other use not defined above. Describe: <u>N/A</u>
<u>100</u>	%	Total (Must equal 100%)

WATER WITHDRAWAL INFORMATION

Year: 2011

Water Withdrawal Registration Number (From Part A, Line 1): 628

Company Name: TVA - SEQUOYAH NUCLEAR PLANT

Copy this page and submit a completed page for each withdrawal or discharge site. See attached instructions.

Part C. Water Withdrawals

Source Point ID Number: N/A
Source Point Name: N/A
Source Type: (G, S, or P): N/A
County: N/A
River Mile: N/A
Latitude: N/A
Longitude: N/A
Datum (NAD 27 or NAD 83): N/A
Map: X NA On File Attached
Method of Measure (A, B, C, D, or E): N/A

JAN Total Withdrawals: N/A MG
FEB Total Withdrawals: N/A MG
MAR Total Withdrawals: N/A MG
APR Total Withdrawals: N/A MG
MAY Total Withdrawals: N/A MG
JUNE Total Withdrawals: N/A MG
JULY Total Withdrawals: N/A MG
AUG Total Withdrawals: N/A MG
SEPT Total Withdrawals: N/A MG
OCT Total Withdrawals: N/A MG
NOV Total Withdrawals: N/A MG
DEC Total Withdrawals: N/A MG

10. Total Annual Withdrawals: N/A MG

11. Total # Days Water Withdrawn in Year: 365

12. Grand Total Water Withdrawals: 579575.70 MG

13. Grand Total # Days Water Withdrawn in Year: 365

14. Average Daily Water Withdrawals: 1587.88 MGD

15. Maximum Day Water Withdrawal: 1654.23 MG

16. Month of Maximum Day Water Withdrawal: October

Part D. Water Discharge (if applicable)

Discharge Point ID Number: 101
Discharge Point Name: TN RIVER (DIFFUSER)
NPDES Permit No.: TN0026450
County: HAMILTON
River Mile: 483.65
Latitude: 35 - 12 - 35
Longitude: 85 - 05 - 14
Datum: NAD 27 or 83: NAD 27
Map: NA X On file Attached

Method of Measure (A, B, C, D, or E): E. Calculated using measured head across outlet conduit

JAN Total Discharge: 50811.00 MG

FEB Total Discharge: 45819.00 MG

MAR Total Discharge: 50183.00 MG

APR Total Discharge: 48141.00 MG

MAY Total Discharge: 44425.00 MG

JUNE Total Discharge: 37287.00 MG

JULY Total Discharge: 51367.00 MG

AUG Total Discharge: 52543.00 MG

SEPT Total Discharge: 48193.00 MG

OCT Total Discharge: 52346.00 MG

NOV Total Discharge: 50341.00 MG

DEC Total Discharge: 51425.00 MG

17. Total Annual Discharges: 582881.00 MG

18. Grand Total Discharges: 582888.30 MG

Part E. Signature

I hereby certify that the information on this form is accurate and complete to the best of my knowledge.

Date: 2/1/2012

19. Print Name: John T. Carlin

Title: Sequoyah Site Vice President

20. Signature: 

WATER WITHDRAWAL INFORMATION

Year: 2011

Water Withdrawal Registration Number (From Part A, Line 1): 628

Company Name: TVA - SEQUOYAH NUCLEAR PLANT

Copy this page and submit a completed page for each withdrawal or discharge site. See attached instructions.

Part C. Water Withdrawals

Source Point ID Number: N/A
Source Point Name: TN RIVER (CCW)
Source Type: (G, S, or P): S
County: HAMILTON
River Mile: 485.2
Latitude: 35 - 13 - 33
Longitude: 85 - 05 - 13
Datum (NAD 27 or NAD 83): NAD 27
Map: NA ☒ X On File Attached
Method of Measure (A, B, C, D, or E): B

JAN Total Withdrawals: 50086.08 MG
FEB Total Withdrawals: 45239.04 MG
MAR Total Withdrawals: 50086.08 MG
APR Total Withdrawals: 48201.12 MG
MAY Total Withdrawals: 45777.60 MG
JUNE Total Withdrawals: 35006.40 MG
JULY Total Withdrawals: 49547.52 MG
AUG Total Withdrawals: 49816.80 MG
SEPT Total Withdrawals: 43623.36 MG
OCT Total Withdrawals: 50086.08 MG
NOV Total Withdrawals: 48470.40 MG
DEC Total Withdrawals: 50086.08 MG

10. Total Annual Withdrawals: 566026.56 MG

11. Total # Days Water Withdrawn in Year: 365

12. Grand Total Water Withdrawals: 579575.70 MG

13. Grand Total # Days Water Withdrawn in Year: 365

14. Average Daily Water Withdrawals: 1587.88 MGD

15. Maximum Day Water Withdrawal: 1654.23 MG

16. Month of Maximum Day Water Withdrawal: October

Part D. Water Discharge (if applicable)

Discharge Point ID Number: 116
Discharge Point Name: TN RIVER (CCW)
NPDES Permit No.: TN0026450
County: HAMILTON
River Mile: 485.2
Latitude: 35 - 13 - 33
Longitude: 85 - 05 - 13
Datum: NAD 27 or 83: NAD 27
Map: NA ☒ X On file Attached
Method of Measure (A, B, C, D, or E): B

JAN Total Discharge: 0.1825 MG
FEB Total Discharge: 0.1825 MG
MAR Total Discharge: 0.1825 MG
APR Total Discharge: 0.1825 MG
MAY Total Discharge: 0.1825 MG
JUNE Total Discharge: 0.1825 MG
JULY Total Discharge: 0.1825 MG
AUG Total Discharge: 0.1825 MG
SEPT Total Discharge: 0.1825 MG
OCT Total Discharge: 0.1825 MG
NOV Total Discharge: 0.1825 MG
DEC Total Discharge: 0.1825 MG

17. Total Annual Discharges: 2.19 MG

18. Grand Total Discharges: 582888.30 MG

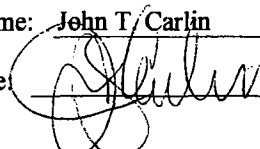
Part E. Signature

I hereby certify that the information on this form is accurate and complete to the best of my knowledge.

Date: 2 / 1 / 2012

19. Print Name: John T. Carlin

Title: Sequoyah Site Vice President

20. Signature: 

WATER WITHDRAWAL INFORMATIONYear: 2011Water Withdrawal Registration Number (From Part A, Line 1): 628Company Name: TVA - SEQUOYAH NUCLEAR PLANT*Copy this page and submit a completed page for each withdrawal or discharge site. See attached instructions.***Part C. Water Withdrawals**

Source Point ID Number: N/A
Source Point Name: TN RIVER (ERCW)
Source Type: (G, S, or P): S
County: HAMILTON
River Mile: 484.85
Latitude: 35 - 13 - 32
Longitude: 85 - 05 - 03
Datum (NAD 27 or NAD 83): NAD 27
Map: NA X On File Attached
Method of Measure (A, B, C, D, or E): B

JAN Total Withdrawals: 1068.54 MG
FEB Total Withdrawals: 956.92 MG
MAR Total Withdrawals: 1071.97 MG
APR Total Withdrawals: 1136.88 MG
MAY Total Withdrawals: 1152.71 MG
JUNE Total Withdrawals: 1122.19 MG
JULY Total Withdrawals: 1299.59 MG
AUG Total Withdrawals: 1227.79 MG
SEPT Total Withdrawals: 1140.51 MG
OCT Total Withdrawals: 1195.03 MG
NOV Total Withdrawals: 1074.84 MG
DEC Total Withdrawals: 1102.17 MG

10. Total Annual Withdrawals: 13549.14 MG11. Total # Days Water Withdrawn in Year: 36512. Grand Total Water Withdrawals: 579575.70 MG13. Grand Total # Days Water Withdrawn in Year: 36514. Average Daily Water Withdrawals: 1587.88 MGD15. Maximum Day Water Withdrawal: 1654.23 MG16. Month of Maximum Day Water Withdrawal: October**Part D. Water Discharge (if applicable)**

Discharge Point ID Number: 117
Discharge Point Name: TN RIVER (ERCW)
NPDES Permit No.: TN0026450
County: HAMILTON
River Mile: 484.85
Latitude: 35 - 13 - 32
Longitude: 85 - 05 - 03
Datum: NAD 27 or 83: NAD 27
Map: NA X On file Attached
Method of Measure (A, B, C, D, or E): B

JAN Total Discharge: 0.4258 MG
FEB Total Discharge: 0.4258 MG
MAR Total Discharge: 0.4258 MG
APR Total Discharge: 0.4258 MG
MAY Total Discharge: 0.4258 MG
JUNE Total Discharge: 0.4258 MG
JULY Total Discharge: 0.4258 MG
AUG Total Discharge: 0.4258 MG
SEPT Total Discharge: 0.4258 MG
OCT Total Discharge: 0.4258 MG
NOV Total Discharge: 0.4258 MG
DEC Total Discharge: 0.4258 MG

17. Total Annual Discharges: 5.11 MG**Part E. Signature***I hereby certify that the information on this form is accurate and complete to the best of my knowledge.*Date: 2/1/201219. Print Name: John T. CarlinTitle: Sequoyah Site Vice President20. Signature: 