



1101 Market Street, Chattanooga, Tennessee 37402

**Sent Via Electronic Transmittal**

January 21, 2022

Mr. Vojin Janjić (water.permits@tn.gov)  
Division of Water Resources  
Tennessee Department of Environment  
and Conservation  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 11th Floor  
Nashville, TN 37243

Dear Mr. Janjić

TENNESSEE VALLEY AUTHORITY (TVA) – BULL RUN FOSSIL PLANT (BRF) – NPDES PERMIT NO. TN0005410 – WASTEWATER TREATMENT UPGRADES TO COMPLY WITH EFFLUENT LIMITATION GUIDELINES (ELG) – 2021 ANNUAL REPORT

In accordance with Part I.F. of the subject permit, please find enclosed an annual report detailing TVA's progress toward installing the necessary equipment to meet the bottom ash transport water ELGs.

If you have questions or need any additional information, please contact Steed Stagnolia at (865) 945-7290 or by e-mail at [skstagnolia@tva.gov](mailto:skstagnolia@tva.gov).

*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,

A handwritten signature in blue ink that reads "Terry L. Gamble". The signature is written in a cursive style.

Terry L. Gamble  
Plant Manager  
Bull Run Fossil Plant

Enclosure

(Electronic Distribution w/ Enclosure):

Ms. Angela Adams (Angela.Adams@tn.gov)  
Coal Combustion Residuals  
Environmental Consultant  
Tennessee Department of Environment  
and Conservation  
Division of Water Resources  
761 Emory Valley Road  
Oak Ridge, Tennessee 37830

Mr. Caleb Nelson (Caleb.Nelson@tn.gov)  
Environmental Protections Specialist  
Tennessee Department of Environment  
and Conservation  
Columbia Field Office  
1421 Hampshire Road  
Columbia, Tennessee 38401

Mr. Rob Burnette (Rob.Burnette@tn.gov)  
Solid Waste Program Manager  
Tennessee Department of Environment  
and Conservation  
1301 Riverfront Parkway, Suite 206  
Chattanooga, Tennessee 37402

Mr. Jim Ozment (James.Ozment@tn.gov)  
Coal Combustion Residual  
Environmental Consultant  
Tennessee Department of Environment  
and Conservation  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 2nd Floor  
Nashville, Tennessee 37243-1548

Mr. James Clark (James.Clark@tn.gov)  
Chief Geologist  
Tennessee Department of Environment  
and Conservation  
Columbia Field Office  
1421 Hampshire Road  
Columbia, Tennessee 38401

Ms. Beth Rowan (Beth.Rowan@tn.gov)  
Environmental Consultant  
Tennessee Division of Remediation  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 11th Floor  
Nashville, Tennessee 37243-1548

Mr. Britton Dotson (Britton.Dotson@tn.gov)  
Environmental Fellow  
Tennessee Department of Environment  
and Conservation  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 11th Floor  
Nashville, Tennessee 37243-1548

Mr. Ron Vail (Ron.Vail@tn.gov)  
Coal Combustion Residual  
Program Manager  
Tennessee Department of Environment  
and Conservation  
1301 Riverfront Parkway, Suite 206  
Chattanooga, Tennessee 37402

Mr. Pat Flood (Pat.Flood@tn.gov)  
Senior Advisor for Technical Assistance  
and Special Projects within the Bureau of  
Environment  
Tennessee Department of Environment  
and Conservation  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 11th Floor  
Nashville, Tennessee 37243-1548

Mr. Robert S. Wilkinson (Robert.S.Wilkinson@tn.gov)  
Coal Combustion Residual Technical Manager  
Tennessee Department of Environment  
and Conservation (TDEC)  
William R. Snodgrass Tennessee Tower  
312 Rosa L. Parks Avenue, 2nd Floor  
Nashville, Tennessee 37243-1548

Mr. Vojin Janjić  
Page 3  
January 21, 2022

cc (electronic distribution):

C. L. Bishop, BR 2C-C  
R. B. Combs, LP 5E-C  
T. L. Gamble, BRF 1A-CTT  
B. M. Love, BR 4A-C  
P. J. Pearman, BR 2C-C  
S. K. Stagnolia, BRF 1A-CTT  
ECM, ENV Records

# Wet FGD Wastewater Treatment & Bottom Ash ELG Project Updates

## TVA Bull Run Fossil Plant – NPDES permit no. TN0005410

### 2021 Annual Report

#### **2021 calendar year update:**

TVA has announced that the Bull Run Fossil Plant will retire by December 1, 2023. TVA is not currently planning any additional upgrades for wet flue gas desulfurization (FGD) wastewater treatment (WWT) or bottom ash transport water (BATW) systems at this site.

#### **General Information:**

##### Effluent Limitations Guidelines NPDES Permit Requirement and Regulations

Part I.F. of the NPDES permit for Bull Run Fossil (BRF) requires the Tennessee Valley Authority (TVA) to provide the Tennessee Department of Environment and Conservation (TDEC) with an annual report detailing progress achieved during the preceding calendar year as well as identification of upcoming projects needed to attain compliance with EPA's Effluent Limitation Guidelines (ELGs). These update reports are due by January 31 of the following year.

TVA presented information requesting an ELG applicability date for all wet FGD ELGs and achieving the 2015 no discharge requirement for BATW of December 1, 2023, at Bull Run Fossil (BRF) plant. TDEC granted that timetable in the NPDES permit issued in 2018.

On October 13, 2020, the United States Environmental Protection Agency published revisions to the ELGs in 40 CFR Part 423. The revised rule modifies technology-based effluent limitations for FGD wastewater and BATW. The rule also establishes several new subcategories that provide separate compliance pathways based on unit operation and asset operating plans.

The EPA established a new subcategory for facilities planning to cease coal combustion by December 31, 2028, ("retirement subcategory"). Best available technology economically achievable (BAT) effluent limitations for FGD wastewater and BATW discharges in the retirement subcategory are equivalent to the limits for total suspended solids (TSS) in § 423.12(b)(11) and § 423.12(b)(4), respectively. In 40 CFR 423.19(f), the ELG Rule lists the requirements for the retirement subcategory which include submission of a NOPP with specified contents as well as an annual progress report that provides updates on the NOPP contents.

On October 6, 2021, TVA submitted a NOPP and confirmed the retirement subcategory for FGD wastewater and BATW for the only coal combustion unit at BRF. The expected date to achieve permanent cessation of coal combustion is December 1, 2023. The Energy Resource Options presented in TVA's 2019 Integrated Resource Plan include the planned retirement of BRF. Milestones that either have been completed or would need to be completed to achieve retirement are listed in the table below:

<b>Milestone</b>	<b>Activity</b>	<b>Date Completed</b>
Integrated Resource Plan	TVA posted the final Record of Decision for the 2019 IRP.	September 17, 2019
National Environmental Policy Act (NEPA) Review	TVA published an Environmental Assessment on the Potential Retirement of Bull Run Fossil Plant and issued a Finding of No Significant Impact	February 11, 2019
Decision to Retire BRF	TVA Board of Directors voted to retire BRF by December 1, 2023	February 14, 2019
Cessation of Coal Combustion Activities	TVA will cease coal combustion at BRF	December 1, 2023