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Sent Via Electronic Transmittal

January 28, 2026

Ms. Sarah Terpstra (water.permits@tn.gov)
Division of Water Resources
Tennessee Department of Environment
and Conservation
Davy Crockett Tower
500 James Robertson Parkway
Nashville, TN 37243

Dear Ms. Terpstra,

TENNESSEE VALLEY AUTHORITY (TVA) – CUMBERLAND FOSSIL PLANT (CUF) – NPDES PERMIT NO. TN0005789 – WASTEWATER TREATMENT UPGRADES TO COMPLY WITH EFFLUENT LIMITATION GUIDELINES (ELG) – 2025 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 wet flue gas desulfurization wastewater and bottom ash transport water ELGs.

If you have questions or need any additional information, please contact Carrie McCarty at (931) 827-6278 or by e-mail at cs McCormart@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 black ink, appearing to read "Martin J. Lane", written over a light blue horizontal line.

Martin J. Lane
Acting Plant Manager
Cumberland Fossil Plant

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ELG Permanent Cessation of Coal Combustion Progress Update

TVA Cumberland Fossil Plant – NPDES permit No. TN0005789

2025 Annual Report

Introduction

Part I. Section 1.3 of the Cumberland Fossil Plant (CUF) National Pollutant Discharge Elimination System (NPDES) permit requires the Tennessee Valley Authority (TVA) to provide an annual progress report to the Tennessee Department of Environment and Conservation (TDEC) detailing the completion of any interim milestones listed in CUF's Notice of Planned Participation (NOPP) in the 2028 Permanent Cessation of Coal (PCCC)¹ subcategory of the Effluent Limitation Guidelines (ELGs), in alignment with Code of Federal Regulations (CFR) 423.19(g). This update report is due by January 31 of the following year.

2025 Calendar Year Update

TVA issued a Record of Decision on January 10, 2023, to cease coal combustion activities at CUF and proceed with construction of a combined cycle natural gas plant for replacement generation one coal-fired unit. The timeline for cessation of coal combustion at CUF remains within that allowable under the 2028 PCCC subcategory.

See below for a listing of milestones submitted with CUF's NOPP in the retirement subcategory:

Milestone	Activity	Date Completed
Integrated Resource Plan	TVA posted the final Record of Decision for the 2019 IRP.	September 17, 2019
National Environmental Policy Act (NEPA) Review	TVA Environmental Impact Statement (EIS) to assess the impacts associated with the proposed retirement of CUF and the replacement generation alternatives	December 9, 2022
Decision to Retire CUF	Record of Decision	January 10, 2023
Cessation of Coal Combustion Activities	TVA to cease coal combustion at CUF	On or before December 31, 2028

Regulatory & Compliance Developments

Effluent Limitations Guidelines – Regulatory Updates

On October 13, 2020, the United States Environmental Protection Agency (EPA) published revisions to the Steam Electric ELGs in 40 CFR Part 423, modifying technology-based effluent limitations for Flue Gas Desulfurization (FGD) wastewater and Bottom Ash Transport Water (BATW). The 2020 rule replaced the previous no-discharge requirement for BATW with a provision allowing discharge of up to 10 percent of the wetted system volume under specific conditions. The rule also established several new subcategories that provide separate compliance pathways based on unit operation and asset operating plans.

¹ The phrase '2028 Permanent Cessation of Coal' is synonymous with the '2028 retirement subcategory,' and both terms are used interchangeably throughout relevant documentation.

For facilities planning to cease coal combustion by December 31, 2028, a retirement subcategory was established. Best available technology economically achievable effluent limitations for FGD wastewater and BATW discharges in the retirement subcategory are equivalent to those previously established in the 2015 ELGs.

On May 9, 2024, the EPA finalized a Clean Water Act regulation that revised the technology-based ELGs for the steam electric power generating point source category applicable to FGD wastewater, BATW, and legacy wastewater at existing sources and combustion residual leachate (CRL) at new and existing sources. In addition, the rule amends the subcategories for separate compliance pathways based on unit and asset operating plans. Subsequently, on December 23, 2025, EPA finalized the ELG Deadline Extension Rule (published in the Federal Register on December 31, 2025, and will be in effect on March 2, 2026). This rule extends specific compliance and NOPP deadlines in the 2024 ELG rule revision and grants state permitting authorities additional flexibility to extend deadlines, including those in the 2020 ELGs, based on demand, reliability, and supply chain concerns.

Notices of Planned Participation - Cessation of Coal Combustion Activities

On October 6, 2021, TVA submitted a NOPP in the 2028 PCCC subcategory for FGD wastewater and BATW for the two coal combustion units at CUF. CUF's retirement EIS was published in the Federal Register on December 9, 2022 and a Record of Decision to cease coal combustion at Cumberland was signed January 10, 2023. This decision aligns with TVA's NOPP for the 2028 retirement subcategory of the 2020 ELGs.

TVA has filed Annual Progress Reports for the 2028 PCCC subcategory to TDEC in January 2021, 2022, 2023, and 2024.

On December 30, 2025, TVA submitted a subsequent NOPP for the 2034 PCCC subcategory for Combustion Residual Leachate (CRL), which was not addressed in the 2020 ELGs.

CUF NPDES Permit TN0005452 Modification Requests

On November 30, 2023, TDEC issued a revised NPDES permit that included permit updates based on the 2020 ELG rule and TVA's modification request. The permit incorporates alternative compliance pathways with corresponding compliance dates for applicable ELG categories and subcategories. The permit also specifies CUF's status in the retirement subcategory of the 2020 ELGs.

Based on the requirement in 40 CFR 122.62(a), TVA applied for an NPDES permit modification on August 6, 2024, pursuant to the 2024 revised ELGs, to incorporate revised limitations based on multiple asset operating scenarios. TVA will submit a subsequent permit modification request to incorporate the new 2025 Deadline Extension Rule.

Integrated Resource Plan (IRP)

TVA is updating the agency's [Integrated Resource Plan](#), which evaluates long-term energy resources, electric generation, and power supply strategies. This process will best inform TVA decision making and asset strategy for managing TVA's coal fleet into the future.

Wastewater Treatment (WWT) System

Wet FGD Systems Description

The existing system for handling wet FGD (gypsum) blowdown at CUF includes primary hydrocyclone(s) with underflow going to vacuum belt filters used to dewater gypsum. Dewatered gypsum is marketed for wallboard production at a Georgia Pacific facility adjacent to CUF. Onsite landfill disposal may occur if CUF's gypsum does not meet specifications for wallboard. Gypsum dewatering operations are currently performed by SynMat[®] with the effluent going to FGD wastewater treatment (WWT) then to the CUF process water basin for treatment, eventually discharging via Internal Monitoring Point 001. The WWT facility, commissioned in Spring 2021, includes both fines dewatering (Stage A) and physical-chemical treatment (Stage B) to manage total dissolved solids such as arsenic and mercury consistent with the requirements for the high flow subcategory in the 2020 ELG Rule.

Wet FGD and BATW 2025 Projects Activities Update

The FGD WWT facility and BATW treatment and discharge are in operation and TVA will continue to address any warranty and operation and maintenance (O&M) issues.