

Bottom Ash ELG Project Updates

TVA Gallatin Fossil Plant – NPDES permit no. TN0005428

2024 Annual Report

Introduction

Effluent Limitations Guidelines NPDES Permit Requirement and Regulations

Part I.F. of the NPDES permit for Gallatin Fossil (GAF) 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 Limitations Guidelines (ELGs). These update reports are due by January 31 of the following year.

On October 13, 2020, the United States Environmental Protection Agency (EPA) published revisions to the Steam Electric ELGs in 40 CFR Part 423. The 2020 revised rule modified technology-based effluent limitations for FGD wastewater and BATW. GAF has a dry scrubber; therefore, the ELGs for FGD wastewater are not applicable. EPA replaced the 2015 BATW no-discharge requirement with a requirement that allows the discharge of up to ten percent of the wetted system by volume in certain prescribed situations. On May 9, 2024, the EPA published new revisions to the ELGs. The 2024 revised rule modifies technology-based effluent limitations for four waste streams: flue gas desulfurization (FGD) wastewater, bottom ash transport water (BATW), combustion residual leachate (CRL), and legacy wastewater. In addition, the rule amends the subcategories for separate compliance pathways based on unit and asset operating plans.

GAF's current NPDES permit aligns with the 2020 ELGs, and GAF operates in the generally applicable category. 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 is updating the agency's [Integrated Resource Plan \(IRP\)](#), which evaluates long-term energy resources, electric generation, power supply, and decarbonization strategies. This process will best inform TVA decision making and asset strategy for managing TVA's coal fleet into the future. Therefore, TVA requested GAF's NPDES permit reflect compliance deadlines for regulated waste streams under each available 2024 ELG category or sub-category.

2024 Bottom Ash Activities Summary

TVA completed the construction and commissioning of the BATW recirculation system and placed the system in-service in August 2023. Periodic sampling was completed from September 2023 through August 2024 to characterize the effluent from the BATW recirculation system to support the development of the Initial Certification Statement (ICS) and the Best Professional Judgement (BPJ) evaluation. The ICS was submitted to TDEC on October 23, 2024.

TVA completed the construction and commissioning of the GAF fire pump upgrades and placed them into service during July 2023.