



1101 Market Street, Chattanooga, Tennessee 37402

Sent Via Electronic Submittal

March 30, 2026

Mr. Jason Hurt
Manager
(email: JasonM.Hurt@ky.gov)
Surface Water Permits Branch
Department of Environmental Protection
Division of Water
300 Sower Boulevard, 3rd Floor
Frankfurt, Kentucky 40601

Dear Mr. Hurt:

TENNESSEE VALLEY AUTHORITY (TVA) – SHAWNEE FOSSIL PLANT (SHF) – KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM (KPDES) PERMIT NO. KY0004219 – MODIFICATION REQUEST

On May 9, 2024, the United States Environmental Protection Agency (USEPA) published revisions to the Steam Electric Effluent Limitation Guidelines (ELGs) in 40 CFR Part 423. These revisions updated technology-based effluent limits for flue gas desulfurization (FGD) wastewater, bottom ash transport water (BATW), legacy wastewater at existing sources, and combustion residual leachate (CRL) at new and existing sources. The rule also amended subcategories to provide separate compliance pathways based on unit and asset operating plans. On August 6, 2024, TVA submitted a modification request to incorporate the 2024 ELGs into the SHF KPDES permit as required by 40 CFR § 122.62(a).

Subsequently, on December 31, 2025, EPA published the final ELG Deadline Extensions Rule, which extends several compliance deadlines for waste streams affected by the 2024 ELG revisions including providing six more years (to December 31, 2031) for existing steam electric power plants to submit a Notice of Planned Participation (NOPP) in the 2034 Permanent Cessation of Coal Combustion (PCCC) subcategory and extending compliance deadlines for zero liquid discharge (ZLD) limitations for the various waste streams by five years (to December 31, 2034). This rule also updated transfer provisions to allow facilities to switch between compliance alternatives and established authority for alternative applicability dates and submission deadlines based on site-specific factors. Because the deadlines in the previously submitted modification request have changed, TVA is submitting this request to incorporate the revisions from the Deadline Extensions Rule.

Currently, TVA is updating its Integrated Resource Plan (IRP), which evaluates long-term energy resources, electric generation, and power supply strategies. This process will guide TVA's decision-making and asset strategy for managing its coal fleet in the future. Therefore,

TVA requests that SHF’s KPDES permit reflect the revised compliance pathways, extended deadlines, and transfer capabilities under each applicable 2024 ELG category or subcategory, as outlined in the updated table¹ below. In addition, TVA seeks deferred deadlines for limits established through Best Professional Judgment (BPJ) to ensure adequate time for implementing required technologies if those determinations differ from current permit limits. Incorporating all compliance pathways into the permit is essential to maintain operational flexibility, address site-specific conditions, and mitigate risks associated with evolving energy demands and regulatory requirements, while ensuring timely and cost-effective compliance.

Category	Waste stream	Limits	Proposed Applicability Date
2024 Generally Applicable	Bottom Ash Transport Water (BATW)	Zero Liquid Discharge	December 31, 2034
	Combustion Residual Leachate (CRL)		
	Unmanaged Combustion Residual Leachate (UCRL)	Arsenic (11, 8 µg/L); Mercury (788, 356 ng/L)	December 31, 2029
	Legacy Wastewater	Best Professional Judgement (BPJ)	Deferred deadlines contingent on BPJ determination
2034 Permanent Cessation of Coal (PCCC) ²	BATW	Zero Liquid Discharge with a purge allowance (high-recycle); BATW purge not to exceed a maximum of 10% of the system wetted volume; BPJ limitations for BATW purge water	December 31, 2025
	CRL	pre-retirement: BPJ	Deferred deadlines contingent on BPJ determination
		post-retirement: Arsenic (11, 8 µg/L); Mercury (788, 356 ng/L)	April 30, 2035
	UCRL	Arsenic (11, 8 µg/L); Mercury (788, 356 ng/L)	December 31, 2029
Legacy Wastewater	BPJ	Deferred deadlines contingent on BPJ determination	

Table 1 - Updated ELG applicability date summary

¹ Please note that SHF operates a dry scrubber; therefore, FGD wastewater ELGs do not apply and are not included in the table.

² The phrase 'Permanent Cessation of Coal' is synonymous with the 'retirement subcategory,' and both terms are used interchangeably throughout relevant documentation.

<u>Category</u>	<u>Activity</u>	<u>Deadline</u>
2034 PCCC	NOPP	December 31, 2031
2024 Generally Applicable and 2034 PCCC	Transfer between categories	December 31, 2034

Table 2 - Updated ELG documentation submission summary

TVA's proposed compliance dates are designed to allow enough time for TVA to update its Integrated Resource Plan (IRP) and incorporate the necessary compliance categories, subcategories, and qualifications from the rule. Including all compliance pathways in the permit ensures that SHF can continue to follow compliance options without needing to request modifications to its permit, maintaining flexibility throughout the process. When determining the appropriate compliance requirements, the permitting authority should consider the following important factors:

1. Time to expeditiously plan (including raising capital), design, procure, and install equipment of very complex systems to comply with the ELGs.
2. Changes being made or planned at the plant required by the Clean Air Act and the Solid Waste Disposal Act/Resource Conservation and Recovery Act.
3. Supply-chain constraints for key components necessary for the new wastewater treatment technologies.
4. Other factors as necessary.

TVA appreciates KDEP's consideration of this request and will continue to coordinate with KDEP on any changes in the ELGs. If you have any questions or need additional information, please contact Callan Pierson by email at cperson@tva.gov.

Sincerely,



Susan Jacks
Senior Manager
Water Permits, Compliance, and Monitoring

Enclosure

Mr. Jason Hurt
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cc (Electronic Distribution w/ enclosure):

Ms. Madeline Traylor
(e-mail: Madeline.Traylor@ky.gov)
Division of Water
Paducah Regional Office
130 Eagles Nest Drive
Paducah, Kentucky 42003

Mr. Andrew Parrish
(e-mail: Andrew.Parrish@ky.gov)
Surface Water Permits Branch
Department of Environmental Protection
Division of Water
300 Sower Boulevard, 3rd Floor
Frankfurt, Kentucky 40601