

**Gallatin Fossil Plant Ash Pond
Complex (APC) Closure
Timeline Extension No. 1**



Prepared by:

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July 19, 2024

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OVERVIEW

The Environmental Protection Agency (EPA) published a final rule to regulate the disposal of coal combustion residuals (CCR) as solid waste under subtitle D of the Resource Conservation and Recovery Act (RCRA). For qualifying units, the EPA Final CCR Rule (CCR Rule) requires that CCR landfills and surface impoundments be closed and maintained in accordance with the CCR closure and post closure requirements of 40 CFR §§257.102 and 104, respectively. Closure must be completed for qualifying landfills and surface impoundments within 6 months or 5 five years, respectively, of commencing closure activities. Based on the CCR Rule, Tennessee Valley Authority (TVA) has determined that the Gallatin Fossil Plant Ash Pond Complex (APC) is an existing CCR surface impoundment and is therefore subject to the CCR Rule closure requirements. This closure timeline extension demonstration serves to show that it will not be feasible to complete closure of the CCR unit within the initial required timeframe due to factors beyond the facility's control. This demonstration includes applicable information required to seek a deadline extension to complete closure of the Gallatin Fossil Plant Ash Pond Complex (APC).

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CLOSURE EXTENSION ALLOWANCE

The Gallatin Fossil Plant Ash Pond Complex (APC) is approximately 435 acres in size and is characterized as a CCR surface impoundment under the CCR Rule. The CCR Rule requires closure of existing surface impoundments within five years of commencing closure activities, with extensions authorized according to 40 CFR §257.102(f)(2)(ii) of no more than five two-year extensions for CCR surface impoundments larger than 40 acres.

This demonstration represents Extension 1, the first 2-year extension requested for this CCR unit, beyond the initial five-year allowance.

TIMELINE EXTENSION DEMONSTRATION

The following factors impact the schedule for closure of the Ash Pond Complex (APC) and require an extension of the closure timeframe beyond the initial five-year period:

- 1) The time required for additional planning and environmental investigation related to the geology and terrain surrounding the CCR unit which has warranted careful study and evaluation for mitigation of personnel safety concerns and environmental risk during CCR removal. This effort also included significant coordination with and approval from state regulatory authorities.
- 2) The time required for mandatory National Environmental Policy Act (NEPA) environmental review required to inform TVA's decision to dispose of the ash removed from the APC in an on-site landfill and select the same as the preferred alternative to meet the projects purpose and need.
- 3) The time required for siting, design, permitting and ongoing construction of the new landfill to accept the removed CCR.

These items are explained in further detail below.

PLANNING AND ENVIRONMENTAL INVESTIGATION

Extensive investigation, planning, and coordination has been required due to the complex geology, and hydrogeology at the site and terrain surrounding the CCR unit. Careful study and evaluation were warranted to ensure the safety of personnel and protection of the environment during the proposed CCR removal. Efforts related to this investigation include:

- Completion of Environmental Investigations per 2016 Agreed Temporary Injunction (April 2016 – June 2020). This effort provided the scientific data that serves as the basis for development of the removal plan and supports the selection of groundwater corrective action plan.
- Development and completion of the Final Environmental Assessment Report (EAR) (June 2020 – June 2023).
- Development and completion of the APC Removal Plan (January 2022 – October 2023).
- Development and completion of the APC Removal Monitoring Plan (December 2022 – August 2023).

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- Development of the APC Groundwater Corrective Action / Risk Assessment Plan (CARA) (July 2023 - Ongoing).

NEPA REVIEW

Prior to making an APC closure decision, TVA was legally obligated to comply with NEPA; given the significance of the potential environmental effects of the alternatives evaluated that could satisfy the projects purpose and need, and the overall complexity of the action, TVA determined that an environmental impact statement (EIS) was the appropriate level of environmental review. TVA evaluated multiple alternatives and methods for closure of the APC, and each required appropriate consideration of environmental, societal and community impacts. Of particular consideration for this project was the final disposition of the CCR materials removed from the APC. To satisfy NEPA's hard look requirements for evaluating certain environmental resource areas, extensive and timely evaluation of many months was required. Extensive consideration of both on-site and offsite disposal, mechanisms for handling and transport of materials, and associated potential impacts to the environment and community were considered and ultimately informed TVA's decision to repurpose part of the plant property for construction of a new landfill. TVA published the notice of intent for the EIS roughly one year and nine months before completing the EIS NEPA process by issuing the associated record of decision.

DESIGN, PERMITTING, AND CONSTRUCTION OF THE SRL LANDFILL

Design, permitting, and construction of the new on-site landfill to store CCR removed from the APC involved extensive and rigorous site characterization, engineering, and permitting efforts in addition to the time required to complete antecedent projects to prepare the site and construct the facility. Design and permitting are complete and the landfill is currently under construction. Below is a high-level timeline of actions completed to support the development of the SRL landfill.

- Solid Waste Part 1 Application submitted to TDEC in 2018.
- Geologic and hydrologic evaluations were performed between 2018 and 2020 as part of the development of the Part II landfill permit application for the TDEC Division of Solid Waste Management (DSWM).
 - Installation, development, and baseline sampling and testing for the monitoring well network.
- Relocation of a historic cemetery was performed in preparation for future landfill construction.
 - Grave relocations performed late-2021 through mid-2022.
 - Required coordination with TDEC and State Historic Preservation Office
- Remediation of a gun-range facility was performed within the footprint of the future landfill construction.
- Due to the karst setting of the Gallatin site, a Karst Mitigation Plan was developed and approved by TDEC DSWM as part of the permit application.

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- Construction of the new landfill kicked off in October 2022 with the first cell scheduled to be completed in late 2024 and the second cell scheduled for completion in in mid-2025.

CONSTRUCTION PLANNING REVIEWS AND APPROVALS FOR THE APC

The APC covers an area of approximately 435 acres and contains approximately 11.9 million cubic yards (cy) of CCR. An additional 800,000 cy (approximate) of impacted soils may be removed from beneath the CCR as part of the closure. In parallel with landfill construction, TVA has selected a removal contractor who is currently finalizing key planning documents for review and approval by TVA and TDEC. These documents, which require TDEC DSWM and Division of Water (DoW) review and approvals prior to moving CCR materials, include:

- Execution Plan outlining the construction methodology and sequencing, Best Management Practices, and moisture condition methods.
- Perimeter Air Monitoring Plan including monitoring points and actions levels.
- Project-specific Health and Safety Plan including Personal Protective Equipment requirements, engineering controls, decontamination procedures, site control, and data management.

TVA estimates excavation rates from the APC ranging from 800,000 cy per year (average) to 1,000,000 cy per year (maximum) in accordance with the approved permit. Assuming maximum excavation rates are achievable, the time estimated for closure would be approximately 12 years. Removal of the approximately 800,000 cy of impacted soils in the surrounding area may add an additional year to that estimate.

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CERTIFICATION

I, Patrick Kiser, certify under penalty of law that I have personally examined and am familiar with the information submitted in this demonstration and all attached documents, and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE



DATE July 19, 2024

ADDRESS:

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