



STATE OF TENNESSEE  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION  
NASHVILLE, TENNESSEE 37243-0435

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COMMISSIONER

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February 18, 2020

**Via Electronic Mail to CCR@TVA.gov**

Attn: Ashley Farless, NEPA Specialist  
Tennessee Valley Authority  
GAF Surface Impoundment Closure & Restoration Project  
1101 Market Street BR2C-C  
Chattanooga, TN 37402

Dear Ms. Farless:

The Tennessee Department of Environment and Conservation (TDEC) appreciates the opportunity to provide comments on the Tennessee Valley Authority (TVA) Gallatin Fossil Plant (GAF) Surface Impoundment Closure and Restoration Project Draft Environmental Impact Statement (EIS), which addresses the potential environmental effects associated with management of coal combustion residuals (CCR) material at the GAF located near Gallatin, Sumner County, Tennessee. According to TVA, the purpose of this project is to address the disposition of CCR onsite at the GAF, to support the implementation of TVA's goal to eliminate all wet CCR storage at its coal plants by closing CCR surface impoundments across the TVA system, and to assist TVA in complying with the Environmental Protection Agency's CCR Rule and other applicable federal and state statutes and regulations.<sup>1</sup> Actions considered in detail within the Draft EIS include:

- **Alternative A – No Action Alternative** – Under the No Action Alternative, TVA assumes it would not close any of the surface impoundments (neither in-place nor by removal), would not construct an expansion of the existing onsite landfill, and would not complete any restorative actions at the GAF. Under the No Action Alternative, all plant process wastewaters would be handled through the flow management system, which includes the bottom ash dewatering facility. The stilling ponds would continue to receive storm water. TVA would continue safety inspections of structural elements to maintain stability, and all surface impoundments would be subject to continued care and maintenance activities. Under the No Action Alternative, TVA would also continue its groundwater monitoring program at the GAF in conjunction with TDEC agreements and the Environmental Investigation Plan (EIP).

According to TVA, this alternative is included because applicable regulations require consideration of a No Action Alternative in order to provide a baseline for potential changes to environmental resources.

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<sup>1</sup> On April 17, 2015, the U.S. Environmental Protection Agency (EPA) published the final Disposal of Coal Combustion Residuals from Electric Utilities Rule (CCR Rule) in the Federal Register (80 Federal Register 21302). The CCR Rule establishes national criteria and schedules for the management and closure of CCR facilities.

However, TVA believes the No Action Alternative is inconsistent with TVA's plans to convert all of its wet CCR systems to dry systems, with EPA's CCR Rule, and with TVA's commitments to the State of Tennessee and TDEC. Consequently, this alternative would not satisfy the project purpose and need and, therefore, is not considered viable or reasonable. It does, however, provide a benchmark for comparing the environmental impacts of implementation of Alternative B.

- **Alternative B – Closure of the Ash Pond Complex (APC) via Closure-by-Removal and Expansion of the Existing Onsite Landfill** – Under Alternative B, TVA would remove the CCR from the APC via Closure-by-Removal and construct a lateral expansion of the existing onsite landfill. In addition to CCR located in the impoundments, any CCR that may have been previously removed from the Bottom Ash Pond in conjunction with a previous GAF wastewater project, and that may be temporarily stockpiled in the existing onsite landfill, would also be removed. Under Alternative B, TVA is considering two options for disposal of CCR removed from the APC. Each of these options is discussed in the following subsections.
  - **Option 1 – Onsite Landfill** – Under Option 1, CCR removed from surface impoundments would be transported via onsite haul roads and placed in the existing onsite North Rail Loop (NRL) Landfill, an expansion of the existing landfill (SRL), or a combination of these landfills. If CCR from the surface impoundments is placed in the NRL Landfill, it may be necessary to construct separate cells or sub-cells to segregate FGD production material from the excavated ponded ash material due to the variability between these two types of CCR.
  - **Option 2 – Offsite Beneficial Re-use Processing Facility and Onsite and/or Offsite Landfill** – Instead of transporting excavated CCR material to an onsite landfill, under Option 2 CCR would be transported to an offsite beneficial re-use processing facility to be processed for use in concrete and other marketable materials. Under Option 2, some of the CCR may be unusable for beneficial re-use and would be disposed of in either the onsite landfill or transported to an existing offsite landfill previously permitted to receive CCR. TVA estimates that a minimum of 80% of CCR in the APC, or approximately 800,000 yd<sup>3</sup> per year, could be beneficially re-used, with the remaining CCR, up to 200,000 yd<sup>3</sup> per year, transported to a landfill for disposal.

TDEC has reviewed the Draft EIS and provides the following comments:

### **General Comment**

TDEC acknowledges that TVA is required by the National Environmental Policy Act to provide corrective action alternatives to address the environmental problems presented by the disposal of CCR material at the TVA GAF. However, TDEC and TVA entered into a Consent Order on July 24, 2019, to resolve the matter of *State of Tenn. et al. v. Tenn. Valley Auth.*, Davidson County Chancery Court No. 15-23-IV, which requires TVA to remove all CCR material from the TVA GAF APC. The Order also allows TVA to conduct a demonstration Project at the TVA Gallatin Non-Registered site to determine if the CCR material at this location can be addressed by treating the disposed CCR material in-place and then capping the disposal area. Tennessee state law requires TVA's compliance with the terms of the final Consent Order and TDEC expects TVA's continued efforts to satisfy its obligations pursuant to those terms.

TDEC encourages TVA to provide additional detail in the Final EIS relating to the long-term soil needs for Alternative B – Option 1 and Alternative B - Option 2 relative to all site and closure needs, including preexisting GAF site needs, borrow site soil availability, APC closure and conversion requirements, and long term landfill operations and management.

## **Cultural and Natural Resources**

There is a potential for Alternative B – Option 1, expansion of the onsite landfill, to disturb cultural resources. Potential effects to archaeological resources should be addressed through consultation with the State Historic Preservation Office and the Section 106 compliance process. TDEC encourages TVA to include these considerations in the Final EIS.<sup>2</sup> TDEC believes the Draft EIS adequately addresses potential impacts to natural resources within the proposed project area.

## **Air Resources**

TDEC encourages TVA to include descriptions and details in the Final EIS of the measures designed to mitigate fugitive lead dust emissions that could be generated during the remediation of the firing range. The planned demolition of buildings is discussed, however no discussion is provided relating to ensuring that any asbestos containing material is identified and managed properly during demolition, and that the appropriate notifications are provided prior to demolition activities commencing. TDEC encourages TVA to include this consideration in the Final EIS.

The open burning of landscape waste material is described in the Draft EIS. TDEC encourages TVA to consider other methods of disposal with lesser air resource impacts that may be available and preferred. Should other suitable disposal methods not be available, when open burning, TDEC recommends avoiding burning on days with poor smoke dispersion, not burning on air quality alert days, use of good smoke management practices when planning the open burning and insuring coordination with local and state air pollution control agencies, forestry agencies and local fire agencies prior to conducting any planned burning.

The amount of material to be processed, if only considering the removal of CCR materials, is likely to be substantial and will require a significant number of dump trucks and related loading vehicles for use onsite. TDEC encourages TVA to include considerations in the Final EIS relating to the use of truck wheel washing stations and wetting, which will likely reduce the possible track-out of CCR materials onto local roads and highways leading to the disposal locations, if Alternative B – Option 2 is considered.

Additionally, TDEC recommends that TVA discuss anticipated emissions generated by the gasoline and diesel fueled trucks and construction equipment used on- and off-site. TDEC further recommends discussion of how these emissions are expected to be minimized through the use of proper maintenance, new emissions control technologies, and fuels along with the minimization of unnecessary heavy duty vehicle idling, and where possible through using newer trucks for long haul off-site transport to help mitigate off-site emissions during transit to the disposal sites.

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<sup>2</sup> For additional information please contact Daniel Brock, State Programs Archaeologist, Tennessee Division of Archaeology by phone at 615-687-4778 or email at [Daniel.Brock@tn.gov](mailto:Daniel.Brock@tn.gov). A court order from Chancery Court must be obtained prior to the removal of any human graves. If human remains are encountered or accidentally uncovered by earthmoving activities, all activity within the immediate area must cease. The county coroner or medical examiner, a local law enforcement agency, and the state archaeologist's office should be notified at once (Tennessee Code Annotated 11-6-107d).

## **Solid Waste**

TDEC recommends that the Final EIS consider and explicitly reflect that any wastes associated with such activities in Tennessee be managed in accordance with the Solid and Hazardous Waste Rules and Regulation of the State of Tennessee (TDEC DSWM Rule 0400 Chapters 11 and 12, respectively). It is important to note that with respect to hazardous waste management, the state's requirements are most often equivalent with federal Resource Conservation and Recovery Act requirements but may in certain situations be state-specific.

## **Water Resources**

The Draft EIS refers to a Draft Karst Mitigation Plan that has been developed for the landfill expansion to address any subsurface karst features that are encountered. TDEC encourages TVA to include additional details from the Karst Mitigation Plan in the Final EIS and offer it as an Appendix to the Final EIS.

TDEC appreciates the opportunity to comment on this Draft EIS. Please note that these comments are not indicative of approval or disapproval of the potential action or its alternatives, nor should they be interpreted as an indication regarding future permitting decisions by TDEC. Please contact me should you have any questions regarding these comments.

Sincerely,



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