

**Document Type:** Supplemental EA -  
Administrative Record  
**Index Field:** Finding of No Significant  
Impact (FONSI)  
**Project Name:** Bottom Ash Process  
Dewatering Facility SEA -  
Permanent Flow  
Management System  
**Project Number:** 2018-25

**FINDING OF NO SIGNIFICANT IMPACT**  
**TENNESSEE VALLEY AUTHORITY**  
**BOTTOM ASH PROCESS DEWATERING FACILITY**  
**PERMANENT FLOW MANAGEMENT SYSTEM**  
**SUMNER COUNTY, TENNESSEE**

Process wastewater flows from the Gallatin Fossil Plant (GAF) are currently being routed to an interim flow management system until they can be directed to the new bottom ash dewatering (BADW) facility, which is currently under construction. After the Finding of No Significant Impact (FONSI) was issued for the BADW facility in 2017, TVA identified the need to implement a permanent flow management system in addition to the BADW facility and prepared a Supplemental Environmental Assessment (SEA) for this proposed action.

**Alternatives**

TVA evaluated two primary alternatives in the SEA: Alternative A – No Action and Alternative B – Closure of the Bottom Ash Pond, Construction of Process Water Basin(s) and Permanent Flow Management System.

Under the Alternative A – No Action, TVA would continue to use the interim flow management system as the permanent flow management system after several minor modifications are made (e.g., removal/abandonment of some discharge piping or tanks) and it is connected with the BADW facility. The combined flow management system and BADW facility would permanently handle process water flows and create dry coal combustion residuals (CCR) for storage in the approved on-site landfill.

Under Alternative B, TVA would close the existing Bottom Ash Pond, and the excavated bottom ash and soil would be removed and transported by truck to the on-site landfill where it would be temporarily stockpiled or beneficially reused for appropriate and approved uses within the landfill. Following removal of all CCR and underlying soil from the Bottom Ash Pond, an approximate 10-acre process water basin (or two basins equaling approximately 10 acres) would be constructed in the former location of the Bottom Ash Pond. Permanent modifications would be made to the interim flow management system (i.e., Alternative A) and the process water basin(s) would be incorporated into the flow management system to receive treated process flows. Following treatment in the process water basin(s), process waters would be discharged via gravity to NPDES Outfall 010.

Aggregate from off-site commercial sources or the TVA owned borrow site would be used to provide backfill for the process water basin(s), and the area would be lined with a geosynthetic liner underlain by a clay liner to prevent seepage through the basin(s). Existing stockpile areas and potential laydown areas at GAF would be used for the project. These include the area adjacent to and surrounding the existing coal pile, Stockpile G located within Middle Pond A, and the rock and structural fill stockpiles adjacent to the on-site landfill.

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TVA's preferred alternative is Alternative A, under which permanent modifications would be made to the interim flow management system and this system would continue to treat process water flows from GAF. The flow management system would be connected to the new BADW facility once construction is completed and it becomes operational. TVA has learned that these tank systems are an efficient and effective way to treat process water flows to maintain compliance with the GAF NPDES permit limits. It is anticipated that the system will further improve once the BADW facility is completed and operational. Under Alternative A, the Bottom Ash Pond would not be closed for the purpose of constructing process water basin(s), and the process water basin(s) would not be constructed at this time.

The alternative to construct a BADW facility and recirculation system was selected as TVA's preferred alternative in the 2017 environmental assessment. The evaluation in the SEA did not impact the preferred alternative in the original BADW Facility EA and does not prevent future recirculation/reuse of the bottom ash effluent as part of the BADW facility operation.

### **Impacts Assessment**

Based on the analyses in the SEA, TVA concludes that the implementation of Alternative A would not affect air quality, vegetation, wildlife, threatened and endangered species, surface water and wastewater, groundwater and geology, wetlands, solid and hazardous waste, transportation, noise, socioeconomics and environmental justice, and safety. Implementation of Alternative A or Alternative B would be consistent with Executive Order (EO) 11998 (Floodplains Management) and EO 11990 (Protection of Wetlands).

Under Alternative B, areas to be used for construction-related activities and operations are already used for heavy industrial use and no changes in land use would occur. There would be minor and temporary construction-related impacts to air quality, transportation and safety. Given the improvements in the quality of the water discharged under Alternative B, the impacts on surface water, wastewater, and aquatic ecology would be minor but beneficial.

Given the limited extent and low quality of habitats potentially lost under Alternative B and the few, common species that may be affected, direct and indirect impacts on vegetation and terrestrial wildlife would not be significant. No listed threatened and endangered species would be adversely impacted by the implementation of Alternative B. With the use of best management practices, there would be no significant impacts to groundwater or groundwater resources. There would be no adverse impacts to wetlands. TVA would manage all solid and hazardous wastes generated from construction and operation activities according to TVA's environmental procedures to comply with all applicable state and federal regulations, and no adverse impacts would result.

Implementation of Alternative B would not result in disproportionate adverse impacts to minority or low income populations. Construction activities would have a very small positive effect on the local economy with the short-term employment of workers.

### **Public and Intergovernmental Review**

The Draft SEA was released for public review and comment for 30 days beginning on September 10, 2019. A notice of availability including a request for comments was distributed with a media

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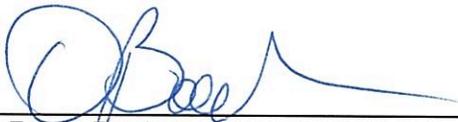
advisory in the Nashville and Gallatin areas. Advertisements appeared in the Gallatin News in the month of September informing the public how to participate and provide comments. The Draft SEA was also posted on TVA's public NEPA review website. TVA's agency involvement included circulation of the Draft SEA to local, state and federal agencies for review. In addition, the Draft SEA was reviewed by the appropriate state agencies in the Tennessee State e-Clearinghouse. TVA held a public open house on September 24, 2019 at the Gallatin Civic Center. Information and maps were provided on various GAF projects including the SEA. TVA received comment letters on the Draft SEA from one private citizen, the Tennessee Department of Environment and Conservation, and the U.S. Fish and Wildlife Service. TVA considered all of the substantive comments received on the Draft SEA and has responded to them in the Final SEA.

### Mitigation

TVA would implement operating permit requirements and the routine best management practices described in the SEA to avoid or reduce minor adverse environmental effects from the proposed action as described in the EA for Alternative A and Alternative B, respectively. TVA has not identified the need for any non-routine mitigation measures to further reduce potential impacts.

### Conclusion and Findings

Based on the findings in the SEA, TVA concludes that implementing Alternative A or Alternative B would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required to implement either of these alternatives. TVA's preferred alternative and the one it is inclined to implement is Alternative A.



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Dawn Booker, Manager NEPA Program  
Environmental Compliance & Operations  
Tennessee Valley Authority

12/31/19

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Date Signed