



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

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Via Electronic Mail to aemasters@tva.gov

Anita E. Masters

NEPA Program and Valley Projects
Tennessee Valley Authority
1101 Market Street
Chattanooga, TN 37402

Dear Ms. Masters:

The Tennessee Department of Environment and Conservation (TDEC) appreciates the opportunity to provide comments on the Tennessee Valley Authority (TVA) *Draft Environmental Impact Statement for Bull Run Fossil Plant Landfill* (Draft EIS). The applicant, TVA, has prepared this Draft EIS to address the storage of coal combustion residual (CCR) at Bull Run Fossil Plant (BRF) in Anderson County, Tennessee. When operating at full capacity, BRF produces approximately 240,000 cubic yards (yd³) per year of ash (bottom and fly ash) and 318,000 yd³ per year of gypsum for a total of approximately 560,000 yd³ of CCR per year, which means TVA would require approximately 11 million yd³ of disposal capacity to accommodate 20 years of CCR generation. The current on-site storage capacity of approximately 1.2 million yd³ will be expended within 10 years. TVA needs to identify additional storage capacity for the long-term disposal of the dry CCR materials (fly ash, bottom ash and gypsum) produced at BRF. Additional storage capacity would also enable TVA to continue operations at BRF as planned and would be consistent with TVA's voluntary commitment to convert wet CCR management systems to dry systems.

On August 6, 2015, TDEC issued a Commissioner's Order (the TDEC Order) to TVA directing the investigation, assessment and remediation of coal ash disposal sites across Tennessee, including BRF. The requirements of the TDEC Order are supplemental to the U.S. Environmental Protection Agency (EPA) CCR rule.¹ The Department recognized that TVA may, in compliance with the federal CCR rule requirements, elect to close CCR surface impoundments and/or landfills before the full extent of contamination at a site has been determined. However, the TDEC Order made it clear that if TVA elects to do so, it may later be required by the TDEC Order to take other and further remedial actions. The Department's review and comment on TVA's Draft EIS shall not be deemed as

¹ In April 2015, the U.S. Environmental Protection Agency (EPA) established national criteria and schedules for the management and closure of CCR facilities. EPA purposefully structured its CCR Rule to encourage regulated entities to accelerate the closure of CCR impoundments because of the decrease in groundwater risk and increased structural stability that results from eliminating the hydraulic head of ponded water. TVA identified impoundments to close prior to the April 17, 2018 deadline. TVA has committed to managing all of its future CCR production in dry storage landfills, closing its existing wet CCR impoundments, and complying with the CCR Rule.

a waiver of any requirement of the Order. TVA should ensure that the proposed actions in the Final EIS are consistent with legal requirements dictated in the TDEC Order.²

Actions considered in detail within the Draft EIS include:

- Alternative A – No Action Alternative – Under the No Action Alternative, TVA would not seek additional disposal options for dry placement of CCR generated at BRF. Rather, CCR would continue to be stored in the current disposal areas for as long as storage capacity is available. Since there is limited capacity for additional CCR disposal on-site, at some point in the future, capacity to store CCR on-site will become a limiting factor for continued BRF operations.
- Alternative B – Construct and Operate a Landfill for Storage of CCR on TVA Property Adjacent to BRF (Site J) – TVA would construct and operate a landfill for disposal of dry CCR generated at the plant on TVA-owned property located approximately 0.4 mi east of BRF. This site, known as Site J, encompasses 119.9 acres and includes perimeter roads, borrow stockpile, and laydown areas and sediment ponds with the landfill footprint of approximately 60 acres. The landfill would provide approximately 15.5 years of disposal capacity based on current estimated consumption rates. Development of Site J would also include construction of a dedicated on-site haul road to convey dry CCR from the plant to the landfill.
- Alternative C – Off-Site Transport of CCR to an Existing Permitted Landfill (Chestnut Ridge) – TVA would transport dry CCR generated at BRF by over-the-road tandem trucks on existing roadways to an existing off-site permitted landfill, Chestnut Ridge Landfill. The Chestnut Ridge Landfill is a Class 1 Municipal Solid Waste Facility located approximately 12 mi northeast of BRF. Based on the current volume of CCR production and the use of over-the-road tandem dump trucks (capacity of 15 yd³), it is estimated that 100 truckloads per day would be needed to transport CCR to the offsite landfill.

TDEC has reviewed the Draft EIS and provides the followed comments, grouped by category.

Air Pollution Control

- Under Sections 3.1.1 “Affected Environmental” and 3.1.2.2.1 “Construction Impacts,” TVA indicates that EPA has designated Anderson County as nonattainment for PM_{2.5}; nearby Knox and Loudon counties are also nonattainment for PM_{2.5}; and Roane County is partial nonattainment for PM_{2.5}. Anderson County is currently in attainment for all criteria pollutants and recommends that TVA correct this information with the Final EIS.³
- Under Section 3.14.2.2.1 “Construction,” it is recommended that any tree or limb debris be disposed of using methods other than open burning. If open burning is determined to be the only acceptable disposal method, it is advised that TVA include within the context of the proposed actions in the Final EIS that such activities will be conducted in a manner to encourage responsible smoke dispersion and in accordance with the state open burning regulatory requirements.⁴

² TDEC enforcement orders require TVA to engage in activities including but not limited to the following: determine the areal and vertical extent of CCR material at each TVA Fossil Plant; determine the extent of soil, surface water and ground water contamination associated with the CCR material at each TVA Fossil plant; determine any environmental and/or public health threats posed by the CCR materials; and develop and implement a Remedial Action and Risk Assessment Plan for each TVA Fossil Plant that resolves the environmental and public health threats the CCR material may pose.

³ The portion of Anderson County that previously was identified as nonattainment for ozone was re-designated to attainment by EPA on August 12, 2015.

⁴ TDEC APC Rule 1200-3-4-.01 *et seq.*, <http://share.tn.gov/sos/rules/1200/1200-03/1200-03-04.pdf>. Additional information on open burning in Tennessee is available at <https://tn.gov/environment/article/apc-open-burning> and <http://www.burnsafetn.org/>.

- “Chapter 4- References” references out of date Environmental Protection Agency (EPA) National Ambient Air Quality Standards (NAAQS). It is recommended that TVA reference the current EPA NAAQS in the Final EIS.⁵

Solid Waste Management

- Under Section 1.2 “Purpose and Need,” the statement is made that “The current on-site storage capacity of approximately 1.2 million yd³ will be expended within 10 years” is not consistent with the production rate of 560,000 yd³ per year. TDEC recommends that TVA specify the remaining on-site disposal capacity and confirm the amount of CCR waste that will be generated in the next 10 years in the Final EIS.
- Under Section 3.14.1.2 “Hazardous Waste,” the facility is currently identified as a small quantity generator (SQG) for hazardous waste. Based upon the various construction activities mentioned in the Draft EIS, there is the potential for the facility to become a large quantity generator (LQG) for hazardous waste due to the potential increase in the quantity of hazardous waste generated. TDEC recommends that TVA review Hazardous Waste LQG requirements to insure continued compliance with hazardous waste regulations.⁶
- Under Section 3.14.2.2.1 “Construction,” if soil is excavated and required to be disposed of at a landfill, special waste approval for disposal of the soil may be required. The Department recommends that TVA acknowledge this requirement within the Final EIS.

Water Resources

- Wastewater treatment will be required for the proposed action and its alternatives. TDEC recommends TVA include general information about wastewater treatment and National Pollutant Discharge Elimination System (NPDES) permitting requirements⁷ in the Final EIS. TVA’s operation, maintenance, and/or closure of CCR impoundments at BRF may affect the quality of surface waters receiving discharges from these sites.
- Any potential runoff from construction and/or demolition project must be monitored, controlled, and properly permitted under the NPDES and Stormwater rules. Additionally, any stream crossings, alterations, or wetland changes as a result of construction or demolition will require an Aquatic Resource Alteration Permit for each action. TVA should identify all actions that will potentially require permits and include a proposed timeline for obtaining these permits within the Final EIS.
- The proposed action and its alternatives will require dewatering of the slurry pond. TVA should include in the Final EIS a list of the chemical constituents and their respective concentrations in the slurry pond water. TVA should also discuss the treatment process of this slurry pond water if it will be discharged into a stream after treatment as well as if the discharge will be under the authority of an NPDES existing permit or if a new permit will be required. If TVA plans to transport the slurry water off-site for disposal, then TVA should provide an explanation of collecting and transporting the slurry water and identify the location that will provide wastewater treatment.

⁵ The current EPA NAAQS table is available at <https://www.epa.gov/criteria-air-pollutants/naaqs-table>.

⁶ Any potential increase in the amount of hazardous waste generated could also result in the need to submit information to the DSWM Waste Audit Section (DSWM WAS) related the new hazardous waste streams, as well as the requirement to submit an annual hazardous waste report with the corresponding fees to the DSWM WAS.

⁷ General information could include that TVA is drafting renewal applications for NPDES permits that will address wastewater treatment for the entire plant site and discharges.

TDEC appreciates the opportunity to comment on this Draft EIS. Please note that these comments are not indicative of approval or disapproval of the proposed 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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