

**FINDING OF NO SIGNIFICANT IMPACT  
TENNESSEE VALLEY AUTHORITY  
KINGSTON FOSSIL PLANT BORROW SITE NO. 3 ENVIRONMENTAL ASSESSMENT  
ROANE COUNTY, TENNESSEE**

The Tennessee Valley Authority (TVA) is proposing to develop a new borrow site (Borrow Site No. 3) on the Kingston Fossil Plant (KIF). Current borrow sources at KIF are committed to landfill construction and operation (Borrow Site No. 1 and Borrow Site No. 2). However, landfill project phasing indicates soil types available in the proposed Borrow Site No. 3 may be needed to supplement the soil types available in the other borrow sites. Additionally, the proposed Borrow Site No. 3 is needed to provide borrow material for other current and future KIF operations and maintenance projects. By developing a new borrow site on KIF property, TVA would be able to cost effectively and efficiently support routine operations, as well as upcoming construction projects.

**Alternatives**

TVA evaluated two primary alternatives in the Environmental Assessment (EA): Alternative A – No Action; and Alternative B – Construct and Operate Borrow Site No. 3.

Under the No Action Alternative, TVA would not develop a new borrow site at KIF. No additional onsite borrow material would be available for current or future projects. During initial project scoping, TVA considered using commercial permitted off-site sources of borrow material. However, the cost of purchasing and transporting borrow material to KIF would be three times the cost of using on-site borrow material. In addition, nearby borrow sites do not appear to have the quantities of material to meet projected needs at KIF.

Under Alternative B, TVA would develop a new 62-acre borrow site on KIF property. It would be located north of the existing coal combustion residuals landfill and south of KIF's intake channel. The borrow site would be developed as-needed based on project demands. When soil material is needed for a project, a 5- to 10-acre area would be cleared and grubbed of all vegetation, and topsoil would be stripped and stored within the limits of the borrow site. Temporary roads would be constructed, and soil materials would be excavated to meet the volume needs required for a specific project. Once the project's needs were met, the exhausted portion of the borrow site would be graded, reclaimed with topsoil, and seeded. Based on projected needs, it is estimated that the borrow site would be exhausted within 20 years.

During tree clearing operations and borrow site preparations, no more than 10 additional workers would be onsite. Depending on tree value and size, it is anticipated that logging would result in some trees being chipped on site and used as mulch, or two to three log trucks leaving KIF per day and traveling to a lumber mill. TVA plans to clear trees during the winter whenever possible, but tree clearing could occur at any time throughout the year, consistent with TVA's programmatic consultation with the U.S. Fish and Wildlife Service (USFWS) on routine actions and federally listed bat species. Appropriate conservation measures would be applied depending on the timing of tree removal.

Once all erosion controls have been installed, grubbing of stumps and brush would be undertaken. The site would then be ready to borrow material. Borrow operations would require between two to five equipment operators and between five to twenty-five trucks and drivers depending on the project (e.g., Phase 2 of the KIF landfill). All borrow material would be used onsite and would not travel on any public roads.

### **Impacts Assessment**

Based on the analyses in the EA, TVA concludes that the implementation of Alternative B would not adversely affect floodplains, streams and wetlands, recreation, prime farmland, navigation, cultural resources, natural areas, and transportation. There would be minor impacts to air quality, climate, water quality, vegetation, wildlife, threatened and endangered species, solid and hazardous waste, visual, noise, and socioeconomic and environmental justice.

Air quality impacts from onsite construction activities (e.g., use of vehicles and construction equipment) would be temporary and would occur only when borrow material is needed. Accordingly, impacts would be minor.

Similarly, the total amount of greenhouse gas (GHG) emissions from the use of internal combustion engines during construction activities and possible release of stored carbon dioxide when forested areas would be cleared would be small and would be spread out over the life of the borrow site (up to 20 years). These emissions would not adversely affect regional GHG levels and would have no discernable link or effect to changes in global climate. Therefore, Alternative B would not result in noticeable impacts on climate change

Construction activities have the potential to temporarily affect surface water via stormwater runoff. TVA would comply with all appropriate state and federal permit requirements. An aquatic hydrologic determination survey of the proposed project documented no aquatic features that could be impacted in the project area, except for the surrounding receiving streams. Use of Best Management Practices (BMPs) to reduce stormwater runoff into the Emory River and Watts Bar Reservoir would minimize adverse impacts, and the proposed action is not anticipated to measurably affect water quality in these two water bodies.

Groundwater contamination could result from sediment infiltration from stormwater runoff during construction and operation activities. BMPs, as described in A Guide for Environmental Protection and Best Management Practices for Tennessee Valley Authority (Bowen et al. 2012), would be used to avoid contamination of groundwater in the project area. With the use of BMPs, no significant impacts to groundwater or groundwater resources are anticipated.

Adoption of Alternative B would result in clearing and grading of the proposed borrow site in phases. A substantial part of the proposed borrow site has been heavily disturbed by previous actions at KIF and does not support intact native plant communities. These areas are dominated by low diversity forest and non-native, invasive species and possess no conservation value. The mature forest that would be impacted does not represent a unique or rare plant community and the habitat is common and well represented throughout the region. The permanent conversion of these habitats to herbaceous vegetation after reclamation of the borrow site would not result in appreciable changes to the vegetation of the region. As a result, implementation of Alternative B would not significantly impact vegetation of the region.

Alternative B would remove wildlife habitat and introduce additional noise and vehicular traffic in adjacent areas. This would result in the displacement of any wildlife (primarily common, habituated species) currently using the area. Direct effects to some individuals may occur if

those individuals are immobile during the time of habitat removal, such as during breeding/nesting seasons. Habitat removal likely would disperse mobile wildlife into surrounding areas to find new food sources, shelter sources and to reestablish territories. Due to the amount of similarly suitable habitat in areas immediately adjacent to and close by on the KIF peninsula, populations of common wildlife species likely would not be impacted by the proposed actions. Following the proposed action, animal species that can utilize reseeded areas are expected to return to the borrow site. Due to the ability of some species to flush to adjacent habitats, the relative abundance of similarly suitable habitat nearby, and the relatively small size of the area of disturbance, it is expected that wildlife habitat impacts would be negligible.

Forested areas within the borrow site area provide suitable summer roosting habitat for the Indiana bat and northern long-eared bat. TVA's programmatic consultation with the USFWS on routine actions and federally listed bats completed in April 2018 addresses similar activities with potential to affect bats. As part of the programmatic consultation, TVA committed to implementing specific bat conservation measures. With the implementation of the identified conservation measures, Alternative B is not anticipated to have a significant impact on threatened and endangered bat species.

Solid waste generated during borrow site construction and operation is expected to be minimal. Any wastes associated with borrow site activities would be managed in accordance with the solid and hazardous waste rules and regulations of the State of Tennessee (TDEC DSWM Rule 0400 Chapters 11 and 12, respectively). Some vegetative debris would be generated due to clearing, stripping, and grading activities and would be managed in accordance with all federal, state, and local regulations. TVA does not burn brush or debris. No hazardous waste would be generated by the proposed activities.

Development of the proposed borrow site would change the scenic integrity of the visual landscape because forested and herbaceous areas would be cleared and maintained free of vegetation while borrow material is excavated. To minimize visual impacts from tree, vegetation, and soil removal, TVA determined that it would not clear the entire 62 acres at one time but operate the borrow site in phases, 5 to 10 acres at a time. Visual impacts would occur over the long term. Based on current projections, the operational life of Borrow Site No. 3 is expected to be approximately 20 years. Once a phase has been exhausted, TVA would regrade and revegetate the area, thereby reducing visual impacts. As a result of phased development and revegetation, visual impacts under Alternative B would occur throughout the life of Borrow Site No. 3 and are anticipated to be minor.

Given the intermittent, short-term nature of construction and operation noise at the borrow site and existing noise from landfill operations and other plant sources, the impact of noise generated from borrow activities is expected to be minor.

While most of the workers involved in the proposed action are anticipated to be existing KIF workers or contractors, implementation of the proposed action would result in minor, short-term beneficial impacts on socioeconomics, primarily through the temporary use of additional workers to cut trees as well as transport logs to a lumber mill during tree removal. Beneficial impacts would extend to environmental justice if workers are hired from minority or low-income populations. Beneficial impacts would be minor due to the relatively small number of additional workers that may be hired and the short duration during which each phase of the borrow site would be developed.

## **Public and Intergovernmental Review**

TVA issued a draft EA for public review and comment on December 6, 2019. Notice of Availability of the draft EA was transmitted to state, federal, and local agencies and federally recognized tribes. It was also posted on TVA's public National Environmental Policy Act (NEPA) review website. A media announcement including a request for comments on the Draft EA was released in the Kingston area. Comments were accepted through December 21, 2019, via mail and e-mail. Four comments were received and can be found in Appendix C of the Final EA.

Pursuant to Section 106 of the National Historic Preservation Act, TVA has consulted with the Tennessee Historical Commission (THC), which is the State Historic Preservation Office (SHPO) requesting concurrence the proposed action would have no effect on cultural resources. The SHPO concurred with this determination in a letter dated June 5, 2019.

## **Mitigation**

TVA would implement routine BMPs listed in the EA to avoid or reduce minor adverse environmental effects from the borrow site activity as described in the EA for Alternative B. In addition, TVA has identified the following non-routine mitigation measures to reduce potential impacts further:

- *Visual Resources.* To minimize visual impacts from tree, vegetation, and soil removal, TVA would not clear the entire 62 acres at one time but operate the borrow site in phases of 5 to 10 acres. As each phase is completed, TVA would regrade and re-vegetate the area to minimize visual impacts.
- *Threatened and Endangered Species.* Several activities associated with the proposed project were addressed in TVA's programmatic consultation with the USFWS on routine actions and federally listed bats in accordance with ESA Section 7(a)(2) and completed in April 2018. For those activities with potential to affect bats, TVA committed to implementing specific conservation measures. These activities and associated conservation measures are identified in TVA's Bat Strategy Project Assessment. TVA would document removal of potentially suitable summer bat roost tree habitat and include this information in annual reporting to the USFWS. TVA currently plans to conduct the tree removal between October 15 and March 31, when Indiana and northern long-eared bats are not on the landscape. This would avoid any potential direct impact to juvenile bats at a time when they are unable to fly. If removal of suitable bat roost tree habitat needs to occur when bats may be present on the landscape, additional conservation measures would be applied per the terms of the programmatic consultation. TVA also would set aside funding to be applied towards future bat-specific conservation projects per TVA's Bat Strategy.

**Conclusion and Findings**

Based on the findings in the EA, TVA concludes that implementing Alternative B – Construct and Operate Borrow Site No. 3, would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required.



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