

FINDING OF NO SIGNIFICANT IMPACT TENNESSEE VALLEY AUTHORITY KINGSTON FOSSIL PLANT STRUCTURE RAZING

The Tennessee Valley Authority (TVA) purchased properties near the Kingston Fossil Plant (KIF) ash spill and ash recovery operation areas as part of its continuing efforts to address the impacts of the December 2008 spill and cleanup. Properties purchased were those that were impacted directly by the spill or remediation efforts and consist of houses, and associated structures such as outbuildings, barns, decks, pools/ponds, and docks. TVA has determined that initially some of the 105 houses and associated structures located on the approximately 900 acres that TVA acquired would need to be removed to meet TVA business needs and to expand the buffer surrounding the KIF Reservation boundary. However, TVA has not made a final determination on the total number of structures that would actually be removed. This analysis addresses the potential removal of all purchased structures so that all potential environmental impacts can be identified.

TVA has assessed the impact of the proposed action in an environmental assessment (EA) prepared in accordance with its procedures for implementing the National Environmental Policy Act. The EA is incorporated by reference.

Alternatives

TVA analyzed two feasible alternatives in the EA, i.e., No Action and Action.

Under the No Action Alternative, TVA would not demolish the structures. Taking no action would not cause direct short-term local effects, and anticipated health and safety benefits would not occur in the region. Adoption of this alternative would not meet TVA's objectives.

Under the Action Alternative, TVA would initially demolish approximately 66 of the 105 houses recently acquired on the impacted property near KIF as well as some of the associated structures. Construction debris and waste materials from the houses and associated structures would be removed from the area and properly disposed of at approved facilities in compliance with Tennessee waste regulations and laws. Any houses and structures not demolished would be included in a strategy to be developed following cleanup of the ash spill. The potential for environmental effects due to removal of all structures that were acquired by TVA have been analyzed in the EA.

Impacts Assessment

Based on the nature of the proposed action and characteristics of the project area, potential effects to aquatic ecology, endangered and threatened species, wetlands, floodplains, navigation, recreation, prime farmland, managed areas and ecologically significant sites, nationwide rivers inventory, and global climate change were determined to be minor and insignificant to the potentially affected resources from implementing the No Action and the Action Alternatives are compared in Table 1.

Table 1. Summary and Comparison of Alternatives by Resource Area

Issue Area	Impacts From No Action Alternative	Impacts From Proposed Action Alternative
Solid Waste	The houses would continue to deteriorate, creating a safety hazard and potentially causing exposure to asbestos-containing material.	If all the houses and associated structures purchased were removed, approximately 52,000 cubic yards of landfill space would be utilized.
Transportation	There would be no change from current conditions.	The level of service for the common route to Interstate Highway 40, which is Swan Pond Road to United States Highway 70 and then to Pine Ridge Road is, expected to remain the same. The increase in potential for accidents would be minor.
Air Resources	There would be no change from current conditions.	Impacts from demolition and hauling activities would be temporary and minor.
Socioeconomics and Environmental Justice	The houses would deteriorate, causing health and safety concerns, creating negative aesthetic qualities and potentially causing a drop in the nearby property values.	There would be potential health and safety benefits, increased aesthetic qualities, and a potential for increased property values. Effects to environmental justice would be minor.
Visual Resources	Deterioration of the structures over time would have negative impacts and would adversely affect the aesthetic qualities of the area.	There would be beneficial visual changes by restoring the area to a naturally appearing landscape, increasing scenic attractiveness.
Water Resources	Potential surface water and groundwater impacts could occur as the structures deteriorate.	With the use of best management practices, water quality impacts would be minimal. Reduction in the concentrated storm water runoff from impervious surfaces is expected to reestablish a more natural runoff regime. Improvements to groundwater quality are likely from the filling of septic tanks.
Land Use	Formerly occupied and now deserted residential area would provide reduced health and safety benefits.	Open public shoreline lands would provide a more natural setting facilitating anticipated health and safety benefits.
Terrestrial Ecology	There would be no change from current conditions.	No impacts are expected with application of avoidance measures.
Noise	There would be no change from current conditions.	Noise impacts would be insignificant.
Archaeological and Historic Resources	There would be no change from current conditions.	None

The Tennessee State Historic Preservation Officer and all responding Tribal Historic Preservation Officers concurred that the project contains no historic properties eligible for listing in the National Register of Historic Places.

Public and Intergovernmental Review

This EA was posted on TVA's Web site for public comment from May 5, 2011, through May 20, 2011. Copies of the EA were sent to the National Park Service, United States Environmental Protection Agency, Tennessee Department of Environment and Conservation (TDEC), Tennessee Wildlife Resources Agency, the Executive of Roane County, and the mayors of Kingston, Harriman, and Rockwood. In addition, TVA issued a press release to local and regional media outlets concerning the proposed project. Only one comment was received from a single individual identifying an issue that was already addressed in the EA; therefore, no response was necessary.

Mitigation

TVA would adhere to the following routine compliance measures in implementing the Action Alternative:

- Waste materials will be removed from the area and properly disposed of at approved solid waste facilities or recycled in compliance with Tennessee waste regulations and laws.
- Asbestos-containing material abatement will be conducted in accordance with *KIF Work Spec-122210 Specification for Asbestos Abatement for the TVA-Owned Houses* and in accordance with applicable federal, state, and local laws and regulations.
- If necessary, emissions from open demolition areas, paved, and unpaved roads will be mitigated using wet suppression.
- All residential groundwater wells, underground utilities, and septic tanks will be closed. Wells will be over drilled and grouted. All well closures will comply with the "Chapter 1200-4-9 Water Well Licensing Regulations and Construction Standards" (see TDEC 2005 in the EA).
- TVA will work with regional gas and water utility companies to remove and/or cap all underground utilities in accordance with industry standards and regulatory requirements.
- All basements, pools, and ponds on the property will be filled in with fill dirt. If the infrastructure is left in place, boreholes will be placed into the structure to allow for proper soil percolation and drainage. Approximately 7,500 cubic yards of fill will be required for the entire project. This fill will be obtained from the approved KIF borrow area on the peninsula or any other approved borrow source in the area.
- A General National Pollutant Discharge Elimination System Permit for Discharges of Storm Water Associated With Construction Activities (see TDEC 2011 in the EA) for the entire project site will be obtained. As part of this application, a storm water pollution prevention plan (SWPPP) will be developed and implemented to control and confine sediment to the project site. This plan will identify specific best management practices (BMPs) to address demolition-related activities that will be adopted to minimize storm water impacts. A complete list of BMPs and locations will be detailed in the site SWPPP.

To further reduce potential environmental effects, TVA would adhere to the following mitigation measures:

- TVA's request for proposals for the work will require potential bidders to include measures to minimize air pollution, erosion control, noise control, solid waste disposal, and wastewater disposal, among other things. The contract will require that truck owners properly maintain trucks, including tune-ups. Truck routes will avoid schools, historic districts, and downtown areas to the extent possible. Additional requirements will include using ultra-low sulfur diesel fuel and minimizing idling time.
- Demolition activities occurring immediately adjacent to the location of tree swallow boxes will not occur during the breeding season (March 1 through July 1) for this species. In addition, sufficient buffers have been added around tree swallow box locations to help minimize disturbance to nesting birds. Demolition will not occur on property #178 between February 1 and July 15 to minimize disturbance to nesting osprey.
- All denuded areas will be revegetated. Where soil disturbance will occur, the area will be ultimately stabilized and vegetated with native or nonnative, noninvasive grasses and mulched, as described in *A Guide for Environmental Protection and Best Management Practices for Tennessee Valley Authority Transmission Construction and Maintenance Activities*.
- During revegetation, application of fertilizers will be avoided in the areas where karst features and springs occur to prevent groundwater contamination.
- Portable toilets will be provided for the additional construction workforce as needed. These toilets, in addition to the previously mentioned septic tanks cleanout, will be pumped out as needed, and the sewage will be transported by tanker truck to a publicly owned wastewater treatment works that accepts pumpout.
- The equipment used for site preparation and debris removal will be inspected for properly functioning mufflers prior to operation. Site preparation and debris removal will be limited to daylight hours.

Conclusion and Findings

Based on the findings listed above and the analyses in the EA, TVA concludes that the proposed action involving the demolition of structures acquired as a result of the ash spill at KIF would not be a major federal action significantly affecting the environment. Accordingly, an environmental impact statement is not required. This finding is contingent upon adherence to the mitigation measures provided above.



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Date Signed