August 7, 2018

Via Electronic Mail to arfarless@tva.gov
Attn: Ashley Farless, NEPA Specialist
Tennessee Valley Authority
1101 Market St., BR2
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) Draft Environmental Assessment (EA) for the Gallatin Fossil Plant (GAF) Borrow Site located approximately 12 miles northeast of Nashville in Sumner County, Tennessee. TVA proposes to develop a borrow site on TVA-owned property near GAF to support ongoing operations and maintenance activities at GAF. Such actions may include minor erosion repair, site grading, and other activities requiring fill such as drainage improvements. Borrow may also be used as needed for potential future actions not yet determined by TVA.2

Actions considered in detail within the Draft EA include:

- **Alternative A – No Action Alternative.** Under the No Action Alternative, TVA would not develop a borrow area on TVA property. As this material is needed to support current and future operations, TVA would obtain borrow, when needed, from one or more previously permitted commercial sites within 30 miles of GAF.

- **Alternative B – Develop and Operate a Borrow Site on TVA-Owned Property.** TVA proposes to develop a borrow site on TVA-owned property located approximately 1.5 miles northwest of GAF. The borrow site limit of disturbance would encompass approximately 178 acres of the 198-acre project site and is expected to contain suitable soils of sufficient quantity to support ongoing and future borrow requirements at GAF. Preliminary estimates indicate that approximately 164,000 cubic yards (yd³) of topsoil and 987,000 to 1,316,000 yd³ of clay could be obtained from the borrow site. Soil excavation would involve the use of heavy equipment including bulldozers, backhoes, excavators, and tri-axle dump trucks. Topsoil in the borrow area

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1 A borrow site is a designated area where soil, sand, gravel or other materials are excavated for use elsewhere.
2 If and when such actions are undertaken, they will receive separate National Environmental Policy Act (NEPA) review.
would be stockpiled, and borrow soils would be excavated to a maximum depth of approximately 22 feet below ground surface. The majority of the site consists of pastures and fallow cropland. Approximately 37 acres of forested area would be removed; however, the existing tree line along the northern edge of the borrow site would be maintained as a visual buffer. A two-lane gravel road would be constructed on the project site to access the borrow site from Steam Plant Road. Culverts would be placed in the roadside ditches on the western side of Steam Plant Road and along both sides of Cole’s Ferry Road to maintain existing storm water drainage flows. Initial site development activities would only impact lands in the south and western portion of the site, and TVA would install a culvert in the stream at the road crossing. Borrow material would be excavated and loaded onto dump trucks for transport and placement as needed to support current and future projects at GAF. Disturbed areas would be limited to 50 acres or less at any given time. TVA would transport the excavated soil from the borrow site to GAF along existing public roads. Depending on the need of individual projects, TVA estimates an average soil use of approximately 500 yd$^3$ per day. Using an average truck capacity of 15 yd$^3$, this would equate to approximately 34 truckloads of borrow or 68 truck trips along Steam Plant Road during borrow site use. Existing storm water flow patterns would be routed around the borrow site during excavation as needed. Sediment basins would be constructed within the borrow site to prevent sediment deposition into adjacent waterways. Upon cessation of excavation, the borrow site would be graded for proper drainage and vegetated with native, non-invasive plant species.

TDEC has reviewed the Draft EA and has the following comments regarding the proposed action and its alternatives:

**Natural Resources**

TDEC concurs that there is potential for the state listed Streamside Salamander (Ambystoma barbouri) to occur within wet weather conveyances (WWC) of the proposed borrow site project area. If exotic vegetation removal is required for this project, TDEC encourages use of methods that will lessen impacts to the Streamside Salamander and the water quality of the streams on site. TDEC recommends that the Final EA include additional information regarding legal requirements TVA must follow to ensure protection of the Streamside Salamander.

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3 Woody debris and other vegetation may be chipped onsite and used as mulch to prevent erosion or sent offsite to an approved solid waste facility for disposal.

4 The approximately 0.65-mile-long road would be 40 feet wide with 5-foot shoulders and would extend west from Steam Plant Road and cross Cole’s Ferry Road.

5 Ambystoma barbouri is a winter-breeding species generally active from mid-December to mid-March, after which time the adults leave their stream-breeding sites. Larvae may require another 6-10 weeks for transformation after they hatch, but tend to develop rapidly since many of their preferred breeding sites may dry completely in summer. As such, TDEC expects that aquatic larvae will transform and move underground by June 1 of a given year. TDEC tracks occurrences of rare species in partnership with other agencies, academicians, and non-governmental organizations. The Streamside Salamander remains a species of conservation concern due to historic and contemporary loss of breeding sites, and has been listed by the Tennessee Wildlife Resources Agency (TWRA) as a “Need of Management” species. Its status will change to State Endangered with completion of revisions to the Tennessee Threatened and Endangered Species List. TDEC manages a few known populations on state natural areas in Wilson and Rutherford counties. The vast majority of breeding sites, however, remain on private lands. Their presence in Sumner County was first documented only in February 2016 at what is now the Hidden Creek subdivision. Subsequent surveys have demonstrated a much broader distribution in the county, from streams abutting the Cumberland River to source waters near the toe of the Highland Rim escarpment.

6 Please contact Rob Todd with TWRA at 615-781-6577 or Rob.Todd@tn.gov to ensure that legal requirements for protection of the streamside salamander are adequately addressed by the Final EA.
Cultural Resources

Vinson Cemetery (40SU322) and two sites potentially-eligible for the National Register of Historic Places (40SU341 and 40SU342) exist within the area of potential effect (APE.) However, if TVA adheres to proposed avoidance measures there should be no adverse effect on cultural resources. 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). A court order from Chancery Court must be obtained prior to the removal of any human graves. TDEC recommends the Final EA include discussion relating to TVA protocols for encountering and addressing human remains.

Air Resources

Section 3.1.1.1 “Regulatory Framework for Air Quality” states “Sumner County is in attainment with applicable [National Ambient Air Quality Standards] NAAQS ([Environmental Protection Agency] EPA 2018d) and Tennessee ambient air quality standards referenced in the Tennessee Air Pollution Control Regulations Chapter 1200-3-3.” The Tennessee ambient air quality standards referenced in Chapter 1200-3-3 are not up to date with respect to current NAAQS. All comparisons to the NAAQS standards and any nonattainment designation discussion should focus on the federally enforceable NAAQS and the federal ambient air quality designations made by EPA (which are those that are currently effective in Tennessee). EPA completed the Round 2 Area Designations for Sulfur dioxide (SO2) in June and November of 2016 and at that time classified Sumner County, Tennessee as Unclassifiable with respect to the 1-Hr SO2 NAAQS. Sumner County is currently classified as attainment/unclassifiable for all other NAAQS criteria pollutants. TDEC recommends that TVA include this correction in the Final EA.

Water Resources

The Draft EA outlines potential permitting requirements for TVA’s proposed action, which includes a TDEC Aquatic Resources Alteration Permit (ARAP) and 401 Water Quality Certification for any alterations to streams and wetlands on the affected area. As part of the ARAP permitting and review process, an alternatives analysis would be required; this process would include consideration of alternative approaches to avoid stream and wetland related project impacts. Any impacts to stream features will require mitigation through a stream mitigation bank or in-lieu fee program, if credits are available, or TVA will be required to find a suitable site and design a permittee responsible mitigation plan to offset the proposed elimination of water resources. TDEC encourages TVA to consider alternative approaches to reduce potential aquatic resource impacts and include related discussion in the Final EA.

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7 If TVA has any questions regarding these sites or others, please contact Daniel Brock, State Programs Archaeologist, with the TDEC Division of Archaeology at 615-687-4778 or Daniel.Brock@tn.gov.

8 Approaches that could be considered as part of an ARAP alternatives analysis, include; (a) TVA could remove approximately 30 acres from the borrow site limits of disturbance (of the proposed total of 178 acres), (b) TVA currently has borrow areas being permitted at other sites where additional material could be acquired, (c) TVA could consider commercial augmentation of needed material, and/or (d) the document states (on page 5) that six offsite properties on non-TVA owned lands were identified that may be viable for potential borrow development; however, these sites ranged from 11 to 35 miles from GAF, at least a subset of these sites that may require less aquatic resource impacts.
TDEC appreciates the opportunity to comment on this Draft EA. 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,

Kendra Abkowitz, PhD
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cc: Daniel Brock, TDEC, DOA
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