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Scoping Project Name: JOF Ash Impoundment Closure

Project

Project Number: 2018-23

JOHNSONVILLE FOSSIL PLANT **ASH IMPOUNDMENT CLOSURE ENVIRONMENTAL IMPACT STATEMENT SCOPING REPORT**

Prepared by: TENNESSEE VALLEY AUTHORITY Knoxville, Tennessee

March 2020

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Abbreviations and Acronyms

ARAP Aquatic Resources Alteration Permit

CCR Coal Combustion Residuals
CCW Condenser Cooling Water
CGP Construction General Permit
EA Environmental Assessment
EIP Environmental Investigation Plan
EIS Environmental Impact Statement

EO Executive Order

EPA U.S. Environmental Protection Agency

FR Federal Register

JCT Johnsonville Combustion Turbine

JOF Johnsonville Fossil Plant

NEPA National Environmental Policy Act

NPDES National Pollutant Discharge Elimination System

NPS National Park Service

NOI Notice of Intent

PEIS Programmatic Environmental Impact Statement

ROD Record of Decision

TDEC Tennessee Department of Environment and Conservation

TVA Tennessee Valley Authority
USACE U.S. Army Corps of Engineers
USFWS U.S. Fish and Wildlife Service

1.0 Introduction

On November 15, 2019, the Tennessee Valley Authority (TVA) published a Notice of Intent (NOI) in the Federal Register to prepare an Environmental Impact Statement (EIS) to address the potential environmental effects associated with the cclosure of Active Ash Disposal Area Number 2 (Ash Pond 2) at the Johnsonville Fossil Plant (JOF) located in Humphreys County, Tennessee near the City of New Johnsonville. The location of JOF, Ash Pond 2 and other project features are shown on Figure 1.

In addition to Closure-in-Place, TVA is considering four options for disposal of the coal combustion residuals (CCR) from Ash Pond 2 under the Closure-by-Removal alternative. These are: (1) transport and disposal of CCR to an existing offsite permitted landfill, (2) transport and disposal of CCR to a new onsite landfill, (3) transport and disposal of CCR to both an existing offsite permitted landfill and a new onsite landfill, and (4) transport of CCR to a beneficial re-use processing facility for beneficiation as part of concrete and other building material. TVA will develop and evaluate various alternatives to these actions, including the No Action Alternative.

This Scoping Report describes the internal and public scoping for relevant issues relating to these projects and outreach conducted by TVA to notify the public. The Scoping Report also documents the input submitted to TVA by the public and intergovernmental entities during the public scoping period.

1.1 Background

JOF is located on approximately 720 acres of land along the east bank of the Tennessee River (Kentucky Reservoir) in New Johnsonville, Tennessee. Construction of the plant began in 1949 and the plant started operating in 1952. When it was shut down, JOF was the oldest operating fossil plant in the TVA system with ten coal-fired generating units that had a total capacity of 1254 megawatts. In 2012, TVA began to gradually retire all ten units of the coal-fired plant, with the final four units being retired on December 31, 2017.

Originally, all CCR at JOF was sluiced to Ash Disposal Area 1, located north of the coal yard drainage basin (Figure 1). Ash Disposal Area 1 ceased receiving CCR around 1970 when Ash Pond 2 was constructed and began receiving the CCR. Ash Pond 2 is situated on 125 acres of land within Kentucky Reservoir and is surrounded by the reservoir to the north and west. To the south and east of Ash Pond 2 are two dredged channels for coal unloading/barge mooring (boat harbor cchannel) and a condenser cooling water (CCW) intake. To construct Ash Pond 2, TVA dredged material from the boat harbor and CCW channel and used the soil as fill along the east side of the future Ash Pond 2. Fill was placed to an approximate elevation of 370 feet. This fill served as a breakwater to protect barges in the harbor area from wave action on the Kentucky Reservoir. The disposal area is connected to the mainland by a 1,000-foot causeway that supports an asphalt access road.

On July 28, 2016, TVA issued a Record of Decision for a programmatic National Environmental Policy Act (NEPA) review entitled *Ash Impoundment Closure Environmental Impact Statement* (TVA 2016). The purpose of the programmatic environmental impact statement (PEIS) was to support TVA's goal to eliminate all wet CCR storage at its coal plants by closing CCR surface impoundments across TVA's system and to assist TVA in complying with the United States Environmental Protection Agency (EPA) Final Disposal of Coal Combustion Residuals from Electric Utilities rule (CCR Rule) issued on April 17, 2015 (80 Federal Register [FR] 21302), as well as applicable state and federal requirements.

The CCR PEIS programmatically considered TVA surface impoundment closures and the environmental effects of two primary closure methods:

- 1) Closure-in-Place
- 2) Closure-by-Removal

TVA performed a screening analysis to determine the reasonableness of these two closure methods. This analysis evaluated a range of key issues and factors related to closure of surface impoundments and the feasibility of undertaking closure activities. Screening factors included:

- Volume of CCR Materials
- Schedule/Duration of Closure Activities
- Stability
- Risk to Human Health and Safety Relating to Closure Activities
- Potential Effects to Water Resources
- Potential Effects to Wetlands
- Risk to Adjacent Environmental Resources
- Mode and Duration of Transport Activities
- Risk to Human Health and Safety Related to Transport of Borrow and CCR
- Cost

This EIS for closure of Ash Pond 2 at JOF will tier from TVA's 2016 PEIS, relying upon the overarching and bounding analyses performed in the PEIS, while integrating site-specific details and analyses.

1.2 TVA's Objectives

The purpose of this Ash Impoundment Closure EIS is to support the implementation of TVA's goal to eliminate all wet CCR storage at its coal plants by closing CCR surface impoundments across the TVA system, and to assist TVA in complying with the EPA's CCR Rule and other applicable federal and state statutes and regulations.

TVA must make a decision regarding the method of closure of Ash Pond 2. In addition, under the Closure-by-Removal option, TVA must decide how to dispose of the CCR removed from the ash impoundment as well as how to restore the site post closure. TVA's decision will consider factors such as the environment, economic development options, the public's input, and TVA's long-term goals.

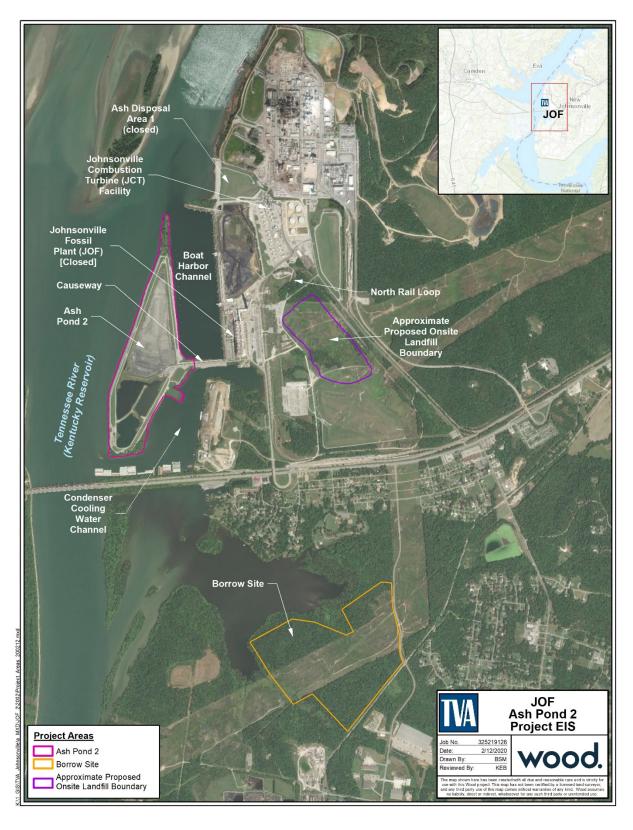


Figure 1. JOF Ash Impoundment Closure Proposed Project Areas

1.3 Related Environmental Reviews

The following completed environmental reviews include certain actions relevant to Ash Impoundment Closure at JOF:

- Final Coal Yard and Coal Yard Runoff Pond Closure, Construction of a Process Water Basin and Development of a Borrow Site on TVA-Owned Property on or near the Johnsonville Fossil Plant Environmental Assessment (TVA 2019a). Retirement of the coal-fired generating units at JOF prompted TVA to evaluate the closure of the coal yard and coal yard runoff pond and construction of a process water basin to manage storm water and non-coal combustion residuals process water from the Johnsonville Combustion Turbine (JCT) Plant. The environmental assessment (EA) also considered the development of a borrow site on TVA-owned property located approximately 1.8 miles south of JOF. Borrow to support the proposed closure of JOF Ash Pond 2 would be obtained from the borrow site evaluated in this EA.
- Final Integrated Resource Plan, 2019 Final Report (TVA 2019b). This plan provides direction for how TVA will meet the long-term energy needs of the Tennessee Valley region.
- Final Johnsonville Fossil Plant Decontamination and Deconstruction Environmental Assessment (TVA 2018). This EA evaluated the disposition of the buildings and structures at JOF that are no longer needed for their original purpose of power generation.
- Final Ash Impoundment Closure Environmental Impact Statement Part I- Programmatic NEPA Review (TVA 2016). The PEIS was prepared to address the closure of CCR impoundments at all of TVA's coal-fired power plants.
- Final Johnsonville Fossil Plant Dike Stabilization Environmental Assessment (TVA 2010). This EA was prepared for a project to stabilize and regrade the dike supporting the northeast side of Ash Pond 2. The project was needed to meet safety standards set by the U.S. Army Corps of Engineers (USACE), as well as to allow TVA to perform routine dike maintenance without affecting slope stability.

2.0 Proposed Alternatives

As a result of internal review and scoping comments, TVA has proposed the following alternatives to be evaluated in the EIS.

2.1 Alternative A – No Action Alternative

Under the No Action Alternative, TVA would not close Ash Pond 2 (neither in-place nor by removal), would not construct an onsite landfill, and would not complete any restorative actions at JOF. Although no additional CCR would be stored in Ash Pond 2 as the plant has ceased operations, the pond would continue to receive storm water as currently permitted under the National Pollutant Discharge Elimination System (NPDES). Process flows from the JCT facility would be rerouted by August 2020 as a result of other, ongoing work. TVA would continue safety inspections of berms to maintain stability and provide continued care and maintenance activities. The No Action Alternative would not comply with the CCR Rule and is inconsistent with TVA's plans to convert all of its wet CCR systems to dry systems. Consequently, this alternative would not meet the Purpose and Need for the proposed action and is not considered reasonable. It does, however, provide a benchmark for comparing the environmental impacts of implementation of the Action Alternatives.

2.2 Alternative B - Closure-in-Place of Ash Pond 2

Under Alternative B, Ash Pond 2 would be Closed-in-Place. Closure-in-Place involves stabilizing the CCR in place and installing an approved cover system. TVA is considering various options for a cover system including a composite flexible membrane liner and cover soil, a compacted clay layer and cover soil, or a Closure Turf® or equivalent system. Cover soil as needed would be obtained from a previously permitted borrow site located on TVA property 1.8 miles south of JOF.

2.3 Alternative C – Closure-by-Removal of Ash Pond 2, Disposal of CCR to a Beneficial Re-use Processing Facility

Under Alternative C, TVA would close Ash Pond 2 via Closure-by-Removal. TVA would excavate the approximately 4.6 million cubic yards of CCR and approximately one foot of underlying soil (total of about 150,000 cubic yards) from the impoundment. Most (estimated at approximately 75 to 95 percent) of the excavated CCR would be loaded into trucks and transported to a beneficial re-use processing facility for use in concrete and other building materials. CCR materials not suitable for beneficial re-use would be transported for disposal to an existing offsite landfill and/or a new onsite landfill that would be constructed on JOF property adjacent to the north rail loop.

TVA does not intend to own or operate the beneficial re-use processing facility; however, TVA recognizes that such a facility has the potential to be constructed and operated because TVA has the necessary raw materials (i.e., CCR) to make such a facility viable. Therefore, TVA is evaluating a potential CCR beneficial re-use processing facility as an action by others that is connected to the Closure-by-Removal of the ash impoundment at JOF. No specific provider of the beneficiation services or the specific site at which a beneficial re-use processing facility would be constructed has been developed at this time. Accordingly, impacts of this option for CCR disposal will be based on a bounding analysis of the characteristics of a representative beneficial re-use processing facility. Following completion of this EIS, if a site is identified for use that does not fall within the criteria of the bounding analysis, a supplemental NEPA document will be required.

TVA is considering two options for post-closure restoration of Ash Pond 2.

2.3.1 Alternative C1 – Post-Closure Site Restoration

Upon completion of the excavation of the area of Ash Pond 2, the site would be restored to a soil and vegetated state. Soil utilized for closure and restoration of the site is proposed to be obtained from a previously permitted borrow site located on TVA property 1.8 miles south of JOF. TVA would evaluate potential future use of this area as needed.

2.3.2 Alternative C2 – Post-Closure Dike Breach

Upon completion of the excavation activities, the dikes surrounding Ash Pond 2 would be breached in one or more places and the interior of the pond would be allowed to be inundated by the reservoir. Some areas may remain above the normal lake level and these would be stabilized and vegetated as needed.

2.4 Alternative D – Closure-by-Removal of Ash Pond 2, Disposal of CCR to an Existing Offsite Landfill

Under Alternative D, TVA would close Ash Pond 2 by removal in the same manner as Alternative C. However, all material excavated from the pond would be transported offsite to an existing, permitted landfill for disposal. The location of the offsite landfill has not been determined at this time. Potential locations of the offsite landfill and potential methods of transport will be studied and evaluated in the EIS. TVA is considering two options for restoration of Ash Pond 2 following closure activities. These are the same as identified for Alternative C.

2.4.1 Alternative D1 – Post-Closure Site Restoration

Under Alternative D1, the area of Ash Pond 2 would be restored upon completion of the excavation activities to a soil and vegetated state as described for Alternative C1.

2.4.2 Alternative D2 – Post-Closure Dike Breach

Under Alternative D2, upon completion of the excavation activities, the dikes surrounding Ash Pond 2 would be breached in one or more places and the interior of the unit would be allowed to be inundated by the reservoir as described for Alternative C2.

2.5 Alternative E – Closure-by-Removal of Ash Pond 2, Disposal of CCR to a New Onsite Landfill

Under Alternative E, TVA would close Ash Pond 2 by removal as described under Alternatives C and D. However, all of the material excavated from the pond would be loaded into trucks and transported to a new landfill that would be constructed on JOF property adjacent to the north rail loop. As identified in Alternatives C and D, TVA is considering two options for post-closure restoration of Ash Pond 2.

2.5.1 Alternative E1 – Post-Closure Site Restoration

Under Alternative E1, the area of Ash Pond 2 would be restored upon completion of the excavation activities to a soil and vegetated state as described for Alternatives C1 and D1.

2.5.2 Alternative E2 – Post-Closure Dike Breach

Under Alternative E2, upon completion of the excavation activities, the dikes surrounding Ash Pond 2 would be breached in one or more places and the interior of the unit would be allowed to be inundated by the reservoir as described for Alternatives C2 and D2.

2.6 Alternative F – Closure-by-Removal of Ash Pond 2, Disposal of CCR to an Existing Offsite and New Onsite Landfill

Under Alternative F, TVA would close Ash Pond 2 by removal as described under Alternatives C, D, and E. However, as TVA has yet to determine the configuration of the potential new onsite landfill, any material excavated from the pond that could not be disposed in the onsite landfill would be transported offsite for disposal to an existing, permitted landfill. As identified in Alternatives C, D, and E, TVA is considering two options for restoration of Ash Pond 2 following closure activities.

2.6.1 Alternative F1 – Post-Closure Site Restoration

Under Alternative F1, the area of Ash Pond 2 would be restored upon completion of the excavation activities to a soil and vegetated state as described for Alternatives C1, D1, and E1.

2.6.2 Alternative F2 – Post-Closure Dike Breach

Under Alternative F2, upon completion of the excavation activities, the dikes surrounding Ash Pond 2 would be breached in one or more places and the interior of the unit would be allowed to be inundated by the reservoir as described for Alternatives C2, D2, and E2.

3.0 Environmental Review Process

NEPA regulations require an early and open process for deciding what should be discussed in an EIS (i.e., the scope of the document). The NEPA review process is intended to help federal agencies make decisions that are based on an understanding of the action's impacts. NEPA also requires that federal agencies provide opportunities for public involvement in the decision-making process.

As noted, TVA intends to prepare an EIS, the most intensive level of NEPA review, to consider options for management of CCR at JOF. During the development of the EIS, the public, stakeholders, resource and permitting agencies, and other interested parties have two opportunities to provide input on the development of the environmental study. The first opportunity is the initial scoping process that follows the publication of the NOI. The second opportunity for public comment is at the publication of the Draft EIS subsequent to the publication of the Notice of Availability.

In addition to agency and public input, the EIS will also address specific requirements associated with a number of federal laws such as National Historic Preservation Act of 1966, Endangered Species Act of 1973, Clean Water Act of 1972, and Clean Air Act, and would satisfy the requirements of Executive Order (EO) 11988 (Floodplains Management), EO 11990 (Protection of Wetlands), EO 12898 (Environmental Justice), and EO 13112 as amended by 13751 (Invasive Species).

After considering input from the public scoping period, TVA will develop and publish a Draft EIS. The Draft EIS will be available to the public for review and comment for 45 days. During the public comment period on the Draft EIS, TVA will conduct a public meeting. Once the public stakeholders, resource and permitting agencies, and other interested parties have reviewed the document, TVA will consider all comments, make revisions, if necessary, and publish a Final EIS. After a period of at least 30 days, TVA will make a final decision that is summarized in a Record of Decision (ROD).

During the initial public scoping period, TVA estimated that the Draft EIS would be published in late 2020, the Final EIS would be published in spring of 2021, and a final decision could be made as early as summer of 2021. However, Ash Pond 2 is subject to the administrative order issued by the Tennessee Department of Environment and Conservation (TDEC) in 2015 (TDEC Commissioner's Order). Investigations at JOF under the TDEC Commissioner's Order are ongoing, and, as such, a decision on closure of this facility will be dependent upon the requirements of the TDEC Commissioner's Order and, therefore, the schedule is subject to change.

3.1 Public Outreach During the Scoping Period

Public scoping was initiated with the publication of the NOI to prepare an EIS in the Federal Register on November 15, 2019 (Appendix A). The NOI initiated a 35-day public scoping period, which concluded on December 20, 2019. In addition to the NOI in the Federal Register, TVA published notices regarding this effort in newspapers that serve the Humphreys County area; issued a news release to media; and posted the news release on the TVA website to solicit public input. Additionally, notifications were issued to state and federal agencies and interested stakeholders.

TVA held a public scoping meeting on December 2, 2019, in New Johnsonville, Tennessee. Approximately 12 people attended the scoping meeting. Attendees included members of the general public, media representatives, and other special interest groups.

3.2 Summary of Scoping Feedback

TVA received five comments in conjunction with the scoping process. These comments included three comment letters from public agencies, including TDEC, the United States Fish and Wildlife Service (USFWS) and the National Park Service (NPS); one email submission; and one comment received at the public meeting by a member of the public. Comment submissions were reviewed to identify specific issues of concern by each commenter and were grouped in general categories for identification and review. Issues raised by commenters included the following:

- 1) Threatened and Endangered Species The USFWS noted previous consultation on likely adverse effects to the federally listed pink mucket (Lampsilis abrupta) as a result of temporary slope stabilization measures at Ash Pond 2.
- 2) Historic Resources The NPS expressed concern regarding the effect of offsite transport of CCR on the historic or other resources of the Trail of Tears National Historic Trail.
- 3) Cultural Resources TDEC noted that construction of a new onsite landfill has the potential to disturb cultural resources.
- 4) Air Resources TDEC identified the potential for fugitive dust emissions and emissions generated by gasoline and diesel fueled trucks and construction equipment during closure activities. In addition, TDEC also recommended the EIS consider the use of truck wheel washing stations and wetting to minimize fugitive dust impacts on local roads and highways.
- 5) Solid Waste TDEC recommended that any waste associated with the proposed action be managed in accordance with Solid Waste Rules and Regulations of the State of Tennessee.
- 6) Permitting Requirements TDEC referenced a need to comply with appropriate permitting in conjunction with project alternatives including the potential modification of the existing NPDES storm water construction general permit (CGP) and accompanying Stormwater Pollution Prevention Plan. The agency also identified the need for a hydrologic determination study by a certified hydrologic professional to identify all of the aquatic resources within the proposed landfill limits of disturbance to determine the impact to water resources, and the potential for an Aquatic Resources Alteration Permit (ARAP) in conjunction with the construction of a new onsite landfill.
- 7) Future use TVA received one comment suggesting that once closed, the JOF Ash Pond 2 area be restored and used to site a solar power array.

All comment submissions are included in Appendix B.

3.3 Issues to be Addressed

Based on TVA's internal scoping and input gathered from the public scoping process, TVA anticipates the major issues to be addressed in this EIS include:

• Surface Water Resources – TVA will describe the quality of surface water resources, including Kentucky Reservoir, and will analyze the extent to which each closure

alternative would affect water quality directly or indirectly (i.e., through infiltration or runoff).

- Groundwater Resources TVA will use groundwater data obtained from studies
 historically conducted by TVA and additional studies conducted for the Environmental
 Investigation Plan (EIP) under the TDEC Commissioner's Order to describe existing
 groundwater conditions in the vicinity and will analyze the extent to which each closure
 alternative would affect groundwater quality.
- Biological Resources (vegetation, wildlife, and aquatic life) Community types within the
 project area will be described. Significant natural features, including rare species habitat,
 important wildlife habitat, or locally uncommon natural community types will be identified.
 TVA will evaluate the effect of each alternative on terrestrial and aquatic ecosystems.
- Threatened and Endangered Species Federally or state-listed as threatened or endangered plants and animals known to exist in the vicinity of JOF or any of the proposed project areas will be identified. The effects of each closure alternative on endangered, threatened, and rare species in need of management will be evaluated.
- Floodplains and Wetlands Floodplains and wetlands within the proposed project area will be identified. The effects of each of the alternatives on jurisdictional waters and floodplains will be evaluated.
- Geology and Soils Regional geology and soils at proposed project sites will be identified
 and any limitations related to construction and operation will be evaluated. Impacts to prime
 farmland soils will be quantified.
- Land Use Land uses within the proposed project area and within the vicinity (5-mile radius) will be identified. The impacts to land use associated with each of the alternatives will be evaluated.
- Transportation The existing roadway network in the vicinity of JOF, including physical road characteristics (number of lanes, shoulders, and posted speed limits) and existing traffic characteristics will be identified. The effect of borrow transport and transport of CCR to a beneficial re-use processing facility will be evaluated. Additionally, alternative modes of transportation will be considered for the transport of CCR offsite to an existing landfill, and potential effects of each option will be analyzed.
- Recreational and Managed Areas Natural areas, parks, and other managed areas within the vicinity of the alternatives (5-mile radius) will be identified and potential impacts associated with the proposed alternatives will be addressed.
- Visual Resources The aesthetic setting of each project site will be described and an
 analysis of changes to scenic attractiveness and scenic integrity associated with each of
 the alternatives will be completed.
- Cultural Resources TVA will characterize archaeological and historic resources within the Area of Potential Effect. TVA also will discuss any known sites listed on the National Register of Historic Places. The potential effects of each alternative on historic and archaeological resources including the Trail of Tears National Historic Trail will be

evaluated. Results of the analysis will be reviewed by the Tennessee State Historic Preservation Officer and interested tribes.

- Noise Baseline noise conditions will be characterized and noise emissions associated
 with the construction phase equipment use and truck traffic during operations will be
 assessed to determine the potential noise impact of each alternative on sensitive receptors.
- Air Quality and Climate Change Air quality considerations including attainment status and
 regional air quality information will be presented. Impacts to air quality from activities
 associated with each of the alternatives will be evaluated. The impact of emissions from
 each of the alternatives on climate change will be addressed.
- Socioeconomics and Environmental Justice Demographic and community characteristics
 associated with the proposed project and along haul routes to a beneficial re-use
 processing facility will be evaluated. Special attention will be given to identification of
 potential low income and minority populations to evaluate the potential for disproportionate
 adverse impacts in accordance with EO 12898. Economic effects associated with the
 proposed alternatives will also be evaluated.
- Solid and Hazardous Waste Current practices regarding hazardous materials/waste management at JOF will be identified. In addition, TVA will identify impacts from any wastes that would be generated during closure activities, including those uncovered during site preparation or generated during the construction process, that would be subject to solid and hazardous waste rules and regulations of the State of Tennessee. Operational measures (waste management practices) will be incorporated into the assessment of impacts.
- Public Health and Safety Potential effects of each alternative on public health and safety
 will be evaluated. The evaluation will include potential effects of transportation of CCR and
 borrow along public roadways.

The potential direct and indirect impacts of each resource will be assessed in the EIS. Mitigative measures designed to minimize impacts, as appropriate, will be identified. In addition, the EIS will include an analysis of the cumulative impacts of the preferred alternative. A cumulative impact analysis considers the potential impact to the environment that may result from the incremental impact of the project when added to other past, present, and reasonably foreseeable future actions (40 Code of Federal Regulations § 1508.7). The methodology for performing such analysis is set forth in Considering Cumulative Effects under NEPA (Council on Environmental Quality 1997).

4.0 References

Council on Environmental Quality. 1997. Environmental Justice Guidance under the National Environmental Policy Act, Executive Office of the President, Washington, DC. Available at: https://www.epa.gov/sites/production/files/2015-02/documents/ej guidance nepa ceq1297.pdf

Tenne	ssee Valley Authority. 2010. Johnsonville Fossil Plant Dike Stabilization Environmenta Assessment. February 2010.
	. 2016. Final Ash Impoundment Closure Environmental Impact Statement, Part I— Programmatic NEPA Review, June 2016. Chattanooga, TN
	. 2018. Johnsonville Fossil Plant Decontamination and Deconstruction Final Environmental Assessment. December 2018.
	. 2019a. Coal Yard and Coal Yard Runoff Pond Closure, Construction of a Process Water Basin and Development of a Borrow Site on TVA-Owned Property on or near the Johnsonville Fossil Plant Final Environmental Assessment. March 2019.
	. 2019b. Integrated Resource Plan. Volume I – 2019 Final Resource Plan. Tennessee Valley Authority, Knoxville, TN. Retrieved from https://www.tva.gov/Environment/Environmental-Stewardship/Integrated-Resource-Plan (accessed December 2019).

Appendix A Federal Register Notice

LEGAL STATUS

This site displays a prototype of a "Web 2.0" version of the daily Federal Register. It is not an official legal edition of the Federal Register, and does not replace the official print version or the official electronic version on GPO's govinfo.gov.

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LEGAL STATUS

Environmental Impact Statement for Johnsonville Fossil Plant Ash Impoundment Closure

A Notice by the Tennessee Valley Authority on 11/15/2019



This document has a comment period that ends in 35 days. (12/20/2019)

DOCUMENT DETAILS

Printed version:

PDF (https://www.govinfo.gov/content/pkg/FR-2019-11-15/pdf/2019-24830.pdf)

Publication Date:

11/15/2019 (/documents/2019/11/15)

Agency

 $Tennessee\ Valley\ Authority\ (https://www.federalregister.gov/agencies/tennessee-valley-authority)$

Dates

Comments on the scope of the EIS must be received on or before December 20, 2019.

Comments Close:

12/20/2019

Document Type:

Notice

Document Citation:

84 FR 62562

Page

62562-62563 (2 pages)

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2019-24830

DOCUMENT DETAILS

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DOCUMENT STATISTICS

PUBLISHED DOCUMENT

AGENCY:

Tennessee Valley Authority.

ACTION:

Notice of intent.

SUMMARY:

The Tennessee Valley Authority (TVA) intends to prepare an Environmental Impact Statement (EIS) to address the potential environmental effects associated with the future management of coal combustion residuals (CCR) material at the Johnsonville Fossil Plant (JOF) located in Humphreys County, Tennessee. The purpose of this EIS is to address the disposition of Ash Pond 2 at JOF, to support the implementation of TVA's goal to eliminate all wet CCR storage at its coal plants by closing CCR surface impoundments across the TVA system, and to assist TVA in complying with the United States Environmental Protection Agency (EPA) CCR Rule and other applicable federal and state statutes and regulations. TVA will evaluate the closure of JOF Ash Pond 2 and will develop and evaluate various alternatives for closure including the No Action Alternative. One alternative identified by TVA is Closure-in-Place of Ash Pond 2. Another alternative is Closure-by-Removal of Ash Pond 2. TVA is considering four options for disposal of the CCR removed from Ash Pond 2, including transport and disposal of CCR in an existing offsite permitted landfill, transport and disposal of CCR to a new onsite landfill, transport and disposal of CCR to both an existing offsite permitted landfill and a new onsite landfill, and transport of CCR to a beneficial re-use processing facility to be processed for use in concrete and other building materials with any unusable CCR and excavated soil material going to an existing offsite or new onsite permitted landfill.

TVA has identified a potential location for a new onsite landfill. TVA has not selected a potential offsite landfill for disposal of CCR from JOF, and no specific provider of the beneficiation services or specific site at which a beneficial re-use processing facility would be constructed has been developed at this time. Therefore, impacts of these options for CCR disposal would be based on the most impactful or "bounding" characteristics of CCR transport to suitable existing landfills or to a beneficial re-use processing facility. Similarly, the potential effects of construction and operation of the beneficial re-use processing facility will be evaluated using 'bounding' attributes obtained from candidate beneficiation vendors. Public comments are invited concerning both the scope of the review and environmental issues that should be addressed. No decisions have been made about the final disposition of CCR storage at COF Ash Pond 2.

DATES:

Comments on the scope of the EIS must be received on or before December 20, 2019.

ADDRESSES:

Written comments should be sent to W. Douglas White, NEPA Compliance Specialist, 400 W. Summit Hill Drive, WT 11B-K, Knoxville, TN 37902. Comments also may be submitted online at: https://www.tva.gov/nepa (https://www.tva.gov/nepa) or by email to wdwhiteo@tva.gov (mailto:wdwhiteo@tva.gov).

FOR FURTHER INFORMATION CONTACT:

Other related questions should be sent to W. Douglas White, NEPA Compliance Specialist, Tennessee Valley Authority, at 865-632-2252 or wdwhiteo@tva.gov (mailto:wdwhiteo@tva.gov).

SUPPLEMENTARY INFORMATION:

This notice is provided in accordance with the Council on Environmental Quality's regulations (40 CFR parts 1500 (/select-citation/2019/11/15/40-CFR-1500) to 1508) and TVA's procedures for implementing the National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA) and its implementing regulations (36 CFR part 800 (/select-citation/2019/11/15/36-CFR-800)).

TVA Power System and CCR Management

TVA is a corporate agency and instrumentality of the United States created by and existing pursuant to the TVA Act of 1933 that provides electricity for business customers and local power distributors. TVA serves more than 9 million people in parts of seven southeastern states. TVA receives no taxpayer funding, deriving virtually all of its revenues from sales of electricity. In addition to operating and investing its revenues in its electric system, TVA provides flood control, navigation and land management for the Tennessee River system and assists local power companies and state and local governments with economic development and job creation.

JOF had ten coal-fired generating units that had a combined capacity of 1,254 megawatts. Units 5 through 10 ceased power generation in 2012 and \(\text{\text}\) were retired on December 31, 2015. Units 1 through 4 ceased operation and were retired on December 31, 2017. While in operation, JOF consumed approximately 3.5 million tons of coal per year and produced approximately 7,195 million kilowatt-hours of electricity a year. CCR produced as a by-product to burning coal by the collective units was wet-sluiced to Ash Pond 2. It is estimated that approximately 4.6 million cubic yards (yd³) of CCR material remains in JOF Ash Pond 2.

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Historically, TVA has managed its CCR in wet impoundments or dry landfills. In July 2009, the TVA Board of Directors passed a resolution for staff to review TVA practices for storing CCRs at its generating facilities, including JOF, which resulted in a recommendation to convert the wet ash management system at JOF to a dry storage system. On April 17, 2015, the EPA published the final Disposal of CCR from Electric Utilities rule, also known as the CCR Rule.

In June 2016, TVA issued a Final Programmatic Environmental Impact Statement (PEIS) that analyzed methods for closing CCR impoundments at TVA fossil plants and identified specific screening and evaluation factors to help frame its evaluation of closures at its other facilities. A Record of Decision was released in July 2016 that would allow future environmental reviews of qualifying CCR impoundment closures to tier from the PEIS. The PEIS can be found at www.tva.com/nepa (http://www.tva.com/nepa). This EIS is intended to tier from the 2016 PEIS to evaluate the closure alternatives for the JOF Ash Pond 2.

Alternatives

In addition to a No Action Alternative, this EIS will address alternatives that meet the purpose and need for the project. TVA plans to consider the following: (1) Closure-in-Place of Ash Pond 2, (2) Closure-by-Removal of Ash Pond 2 to an Existing Offsite Landfill, (3) Closure-by-Removal of Ash Pond 2 to a New Onsite Landfill,

(4) Closure-by-Removal of Ash Pond 2 to an Existing Offsite and New Onsite Landfill, and (5) Closure-by-Removal of Ash Pond 2 to an Offsite Beneficial Re-use Processing Facility with unusable CCR and excavated soil material going to an existing offsite or new onsite permitted landfill.

No decision has been made about the final disposition of CCR storage at JOF. TVA is preparing this EIS to inform decision makers, other agencies, and the public about the potential for environmental impacts associated with the final disposition of CCR at JOF Ash Pond 2.

Proposed Resources and Issues to be Considered

This EIS will identify the purpose and need of the project and will contain descriptions of the existing environmental and socioeconomic resources within the area that could be affected by the management and final disposition of CCR at JOF. Evaluation of potential environmental impacts to these resources will include, but not be limited to, air quality, climate change, water quality, groundwater, geology and soils, aquatic and terrestrial ecology, threatened and endangered species, wetlands, floodplains, land use, noise, transportation, visual resources, historic and archaeological resources, solid and hazardous waste, safety, socioeconomic and environmental justice issues, and natural areas, parks, and recreation. The final range of issues to be addressed in the environmental review will be determined, in part, from scoping comments received. The preliminary identification of reasonable alternatives and environmental issues in this notice is not meant to be exhaustive or final.

Public Participation

TVA is committed to an open process and wants input from the community. The public is invited to submit comments on the scope of this EIS no later than the date identified in the DATES section of this notice. Federal, state and local agencies and Native American Tribes are also invited to provide comments.

After consideration of comments received during the scoping period, TVA will develop and distribute a scoping document that will summarize public and agency comments that were received and provide a schedule for completing the EIS process. Following analysis of the affected resources, TVA will prepare a draft EIS for public review and comment. A final decision on proceeding with the management and final disposal of CCR and closure of the Ash Pond 2 surface impoundment will be based on a number of factors including public comments, the conclusions of the EIS, the requirements of the CCR Rule, relevant state law requirements, engineering and risk evaluations, and financial considerations.

TVA expects to release the Draft EIS in late 2020. TVA anticipates holding a community meeting near JOF after releasing the Draft EIS. Meeting details will be posted on TVA's website and advertised in local media.

Authority: 40 CFR 1501.7 (/select-citation/2019/11/15/40-CFR-1501.7).

M. Susan Smelley,

Director, Environmental Compliance and Operations.

[FR Doc. 2019-24830 (/a/2019-24830) Filed 11-14-19; 8:45 am]

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Appendix B

Comments Submitted During the Scoping Period

(November 15 through December 20, 2019)



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

DAVID W. SALYERS, P.E.

COMMISSIONER

GOVERNOR

December 20, 2019

Via Electronic Mail to wdwhite0@tva.gov

Attn: W. Douglas White, NEPA Specialist Tennessee Valley Authority 400 West Summit Hill Drive, WT 11B-K Knoxville, TN 37902

Dear Mr. White:

The Tennessee Department of Environment and Conservation (TDEC) appreciates the opportunity to provide comments on the Tennessee Valley Authority (TVA) *Notice of Intent* (NOI) *to prepare an Environmental Impact Statement* (EIS) to address the potential environmental effects associated with the future management of coal combustion residuals (CCR) material at the Johnsonville Fossil Plant (JOF) located in Humphreys County, Tennessee, near the City of New Johnsonville. According to TVA, the purpose of the forthcoming EIS is to address the disposition of Ash Pond 2 at JOF, to support the implementation of TVA's goal to eliminate all wet CCR storage at its coal plants by closing CCR surface impoundments across the TVA system, and to assist TVA in complying with the United States Environmental Protection Agency (EPA) CCR Rule as well as other applicable federal and state statutes and regulations. The forthcoming Draft EIS will evaluate the closure of JOF Ash Pond 2 and will develop and evaluate various alternatives for closure, including a No Action Alternative, an alternative which evaluates closure-in-place of Ash Pond 2, and another alternative which evaluates closure-by-removal. TDEC has reviewed the Draft EIS NOI and provides the following comments:

General Comment

TVA JOF Active Ash Pond 2 is part of the Commissioner's Order¹ (OGC15-0177) environmental investigation. Currently TVA, under TDEC oversight, is collecting data as part of the approved Environmental Investigation Plan (EIP). Data are being collected regarding: groundwater quality, surface water quality, sediment/benthic microorganism quantity/quality, fish tissue analysis, soil quality, ash material quantity/location/chemical characteristics, structural stability of the ash disposal units, geotechnical properties, and site geology/hydrogeology. Once all relevant data have been collected, they will be summarized and evaluated in an Environmental Assessment Report (EAR). The EAR will be prepared by TVA, then reviewed and approved by TDEC. The EAR data will be used to develop a Corrective Action/Risk Assessment (CARA) plan for closure of the ash disposal units (including Active Ash Pond 2), and remediation of any impacts to soil, groundwater, or surface water that are considered to have risks to human health and the environment. The CARA is prepared by TVA, with TDEC review and approval. The investigation is ongoing; a final determination of appropriate closure

1

¹ On August 6, 2015, TDEC issued a Commissioner's Order to TVA directing the investigation, assessment and remediation of all coal ash disposal sites across Tennessee.

has not been made for the Active Ash Pond 2 or any other CCR unit at the TVA JOF. Evaluation or implementation of any closure activities at the TVA JOF prior to TDEC's final selection of remedy risk potential additional remedial activities or alternate closures once the investigation is complete.

Cultural and Natural Resources

TDEC finds that there is a potential for construction of a new onsite landfill to disturb cultural resources. Potential effects to archaeological resources should be addressed through consultation with the State Historic Preservation Office and the Section 106 compliance process. TDEC encourages TVA to include these considerations in the Draft EIS.²

Air Resources

TDEC encourages TVA to include descriptions and details in the Draft EIS of the measures designed to mitigate fugitive dust emissions likely to be generated during the site closure and transport phases of the project. If the site deconstruction is also planned to occur at the same time, additional consideration should be given to ensure that demolition related emissions are minimized, that any asbestos containing material (ACM) is identified and managed properly during demolition, and that the appropriate notifications are provided prior to demolition activities commencing.

The amount of material to be processed, if only considering the removal of CCR materials, is likely to be substantial and will require a significant number of dump trucks and related loading vehicles for use onsite. TDEC encourages TVA to include considerations in the Draft EIS relating to the use of truck wheel washing stations and wetting, which will likely reduce the possible track-out of CCR materials onto local roads and highways leading to the disposal locations.

TDEC encourages TVA to include discussions of the proposed locations for either on- or off-site disposal of the CCR along with a discussion of the alternative locations in the region where disposal could be accomplished by barge and rail car transport. Limiting truck transport to no more than 30 miles from the CCR removal site may be an option to help mitigate transportation costs.

Additionally, TDEC recommends that TVA provides discussion of the anticipated emissions generated by the gasoline and diesel fueled trucks and construction equipment used on- and off-site. TDEC further recommends discussion of how these emissions are expected to be minimized through the use of proper maintenance, new emissions control technologies, and fuels along with the minimization of unnecessary heavy duty vehicle idling.

Solid Waste

TDEC recommends that any wastes associated with the forthcoming alternatives be managed in accordance with the Solid and Hazardous Waste Rules and Regulations of the State of Tennessee.³ TDEC recommends that the Draft EIS reference that any wastes that are generated during the construction process or uncovered during site preparation are subject to the Solid and Hazardous Waste Rules and Regulations of the State of Tennessee.

² For additional information please contact Daniel Brock, State Programs Archaeologist, Tennessee Division of Archaeology by phone at 615-687-4778 or email at Daniel.Brock@tn.gov.

³ Reference TDEC SWM Rule 0400 Chapter 11 for Solid Waste and Chapter 12 for Hazardous Waste http://sos.tn.gov/effective-rules.

Water Resources

TVA JOF has an existing National Pollutant Discharge Elimination System (NPDES) Stormwater Construction Permit (CGP) and an accompanying Storm Water Pollution Prevention Plan that will likely need to be modified as the work for closure begins. A new onsite landfill will require a CGP and a hydrologic determination study by a certified hydrologic professional to identify all of the aquatic resources within the project limits of disturbance to determine the impact to water resources. Based on the potential presence of aquatic resources and the hydrologic determination review, an Aquatic Resources Alteration Permit may be necessary. TDEC encourages TVA to incorporate discussion relating to these various considerations in the Draft EIS.

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

Matthew Taylor

Senior Policy Analyst, Office of Policy and Sustainable Practices

Tennessee Department of Environment and Conservation

Matthew.K.Taylor@tn.gov

(615) 532-1291

cc: Kendra Abkowitz, PhD, TDEC, OPSP

Daniel Brock, TDEC, DOA Lacey Hardin, TDEC, APC

Lisa Hughey, TDEC, DSWM

Tom Moss, TDEC, DWR

Robert Wilkinson, TDEC, BOE

Stephanie Williams, TDEC, DNA



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Tennessee ES Office 446 Neal Street Cookeville, Tennessee 38501



December 6, 2019

Mr. W. Douglas White Tennessee Valley Authority NEPA Compliance Specialist 400 W. Summit Hill Drive, WT 11B-K Knoxville, TN 37902

Re: Notice of Intent for the Johnsonville Fossil Plant Ash Impoundment Closure Environmental Impact

Statement.

Dear Mr. White:

The U.S. Fish and Wildlife Service (Service) has reviewed the Tennessee Valley Authority's (TVA) Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) to address the potential environmental effects associated with the future management of coal combustion residuals (CCR) material at the Johnsonville Fossil Plant (JOF) located in Humphreys County, Tennessee. TVA has coordinated with the Service over the past decade regarding your plans to relocate wet CCRs from the JOF facility and Johnsonville Island to an offsite location and convert to dry ash storage. This coordination has included formally consulting on likely adverse effects to the listed pink mucket (*Lampsilis abrupta*) as a result of temporary slope stabilizations measures at JOF Ash Pond 2 until closure of the site, and transport and disposal of CCR to an existing offsite landfill is permanently realized (FWS #2010-F-0152, Biological Opinion - Dike Stabilization of the Johnsonville Ash Storage Pond).

The Service is supportive of TVA's goal, "to eliminate all wet CCR storage at its coal plants by closing CCR surface impoundments across the TVA system". Such efforts will assist in minimizing the adverse effects CCRs and associated coal plant operations and maintenance have on aquatic organisms and their habitats in the TVA Service Area. At this time, we have no additional comments to provide regarding your NOI. However, we do ask to be kept informed as final decisions are made about the final disposition of CCR storage in regards to JOF Ash Pond 2. We also wish to be provided an opportunity to review and provide comment on your draft EIS, upon its completion.

As always, the Service appreciates the coordination and opportunity to comment provided by TVA. If we can be of further assistance, please contact Todd Shaw of my staff at (931) 525-4985 or by email at <u>ross shaw@fws.gov</u>.

Sincerely,

Virgil Lee Andrews, Jr.

Roht E. Sph for

Field Supervisor

xc: Stephanie Nash, FWS, BER (ERT) Christine Willis, FWS, SE Region



United States Department of the Interior

NATIONAL PARK SERVICE

Atlanta Federal Center 1924 Building 100 Alabama Street, SW Atlanta, GA 30303



IN REPLY REFER TO: 1.A.2 (SERO-PC)

DEC 1 2 2019

W. Douglas White NEPA Compliance Specialist Tennessee Valley Authority 400 W. Summit Hill Drive, WT 11B–K Knoxville, TN 37902

Dear Mr. White:

The National Park Service (NPS) has reviewed the Tennessee Valley Authority (TVA) notice of intent to prepare an environmental impact statement (EIS) to address the potential environmental effects associated with the future management of coal combustion residuals (CCR) material at the Johnsonville Fossil Plant (JOF) located in Humphreys County, Tennessee, near the City of New Johnsonville. This EIS would address the disposition of Ash Pond 2 at JOF, to support the implementation of TVA's goal to eliminate all wet CCR storage at its coal plants by closing CCR surface impoundments across the TVA system, and to assist TVA in complying with the United States Environmental Protection Agency (EPA) CCR Rule and other applicable federal and state statutes and regulations.

The NPS supports TVA's overall goals for the project, but we are concerned about the potential effects of transporting CCR to offsite permitted landfills on historic or other resources of the Trail of Tears National Historic Trail (NHT) for which the NPS has administrative responsibility. Potential impacts could include altered settings along transportation routes or altered road beds as a result of truck traffic.

Therefore, please ensure that potential impacts to the Trail of Tears NHT are addressed in your analyses regarding the project, and that we are included in any applicable future correspondence. Please let us know if we can supply you with copies of the congressionally designated alignment of the trail for use in your analysis. The NPS looks forward to consulting with you on the undertaking. Please direct questions to Jill Jensen, at 801-741-1012 ext. 115 or jill_jensen@nps.gov

Sincerely,

Ben West

cc:

Chief, Planning and Compliance Division

Mr. E. Patrick McIntyre, Jr., Tennessee Historical Commission

Name: Paulina Marusarz

Comments: An Environmental Impact Statement to address the potential environmental effects associated with the future management of coal combustion residuals will prepare the Johnsonville Fossil Plant (JOF) located in Humphreys County, Tennessee by providing them with information on how the Tennessee Valley Authority intends to proceed. Currently, there are two actions that may be taken. One includes the Closure-in-Place of Ash Pond 2. Another alternative is Closure-by-Removal of Ash Pond 2. There are also four options for disposal of the CCR removed from Ash Pond 2. It is important to address these potential ideas and environmental effects in order to receive feedback from the public.

close window

In writing at: Tennessee Valley Author ATTN: Doug White, ALF 400 W. Summit Hill Drive Knoxville, TN 37902 Comments must be received.	DEIS (/ia email at: wdwhite0@ Online at: https://www.tva.com/N ent period, November 25	tva.gov EPA , 2019.
Name:	Email:		TVA