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To: [Vojin Janjic](#); [Water Permits](#)
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Subject: [EXTERNAL] 2023 Kingston Fossil Plant Seepage action plan
Date: Wednesday, June 28, 2023 7:38:48 AM
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1101 Market Street, KFP 1A, Kingston, Tennessee 37763

Sent Via Electronic Transmittal

June 28, 2023

Mr. Vojin Janjić, Manager (Water.Permits@tn.gov)
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Dear Mr. Janjić:

TENNESSEE VALLEY AUTHORITY (TVA) - KINGSTON FOSSIL (KIF) PLANT - NPDES PERMIT
NO. TN0005452 - SEEPAGE ACTION PLAN ANNUAL REPORT

Enclosed is the KIF seepage action plan annual report submitted in accordance with Part III.D and Part III.E of the facility NPDES permit. If you have questions or need additional information concerning this report, please contact Adele Dennison at 865-717-2157 or by e-mail at amdennison@tva.gov.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Sincerely,

A handwritten signature in black ink, which appears to read "Timothy D. Jackson", is written over a horizontal line.

Timothy D. Jackson
Plant Manager
Kingston Fossil Plant

Enclosure

Enclosure

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Plant: Kingston Fossil Plant (KIF)

Date: June 28, 2023

Subject: Annual Seepage Report

Reference: National Pollutant Discharge Elimination System (NPDES) Permit No. TN0005452
Part III - Other Requirements
Subpart E: *Seeps*

1. Introduction

KIF is a fossil-fueled, steam-electric generating plant operated by TVA that has nine coal fired generating units. It is located north of Kingston, Roane County, Tennessee on Swan Pond Road. Discharge from the plant is regulated under NPDES Permit No. TN0005452 (effective date March 1, 2018, modification issuance date December 1, 2021). In accordance with Part 111.E. of the facility NPDES permit, TVA implements a Seepage Action Plan (SAP) in accordance with Part 111.E that prescribes inspection of the active impoundments with earthen dikes and inactive ash disposal areas and response procedures to findings of new seeps or seeps with changed conditions. This annual report describes the results of seep inspections, a listing of seep conditions, and remedial actions completed and in progress in accordance with the SAP.

2. Seep Inspections

The following table denotes when a seep inspection was performed and findings of the inspection. For purposes of this annual report, the inspections performed from the effective date of the permit to present day are listed.

Date	Seep Conditions*
FY2022, 4 th Quarter, September 22, 2022	No new seeps, no change in conditions
September 29, 2022	AOI identified at location of Seep 4.
FY2023, 1 st Quarter, November 29, 2022	No new seeps, no change in conditions
FY2023, 2 nd Quarter, March 23, 2022	No new seeps, no change in conditions
FY2023, 3 rd Quarter, June 20, 2023	No new seeps, no change in conditions

*For seep conditions at the historic seeps, see Section 3 of this report

3. Listing of Seep Conditions

Three (3) historical seeps are present on-site and the current condition of each of these areas is described below. An approximate location of each historic seep is depicted in Appendix A of the Seepage Action Plan.

- Seep 2: Seep is located at the Sluice Trench and Area East of the Sluice Trench (Seepage Action Plan, Appendix A, Figure 1). The history and remedial actions are described in detail in Section 2.1 of the SAP. No change in conditions were observed at this location during the reporting period.
- Seep 3: Seep is located at the east toe of the Stilling Pond (Seepage Action Plan, Appendix A, Figure 2). The history and remedial actions are described in detail in Section 2.1 of the SAP. No change in conditions were observed at this location during the reporting period.
- Seep 4: Seep was identified on March 5, 2019 at the Sluice Trench & Area East of the Sluice Trench unit and determined to be a seep on March 14, 2019. Seep mitigation was completed on May 1, 2019 and a detailed description was provided in the July 2019 Annual Seepage Report, Section 4.

An area of interest (AOI) was identified on September 29, 2022 when red water staining was noticed at the discharge end of the stormwater drainage pipe. The AOI was determined to be a seep, and TDEC was notified October 19, 2022. After investigation, it was determined that the drainage pipe upstream of the seep had disconnected with the reinforced concrete catch basin, and a remediation was developed.

4. Summary of Remedial Actions

The following remedial actions were planned and/or conducted this reporting period to repair seeps identified on site:

- Seep 4: Monthly inspection are on-going and construction is in progress. Remediation actions began first of calendar year 2023 and projected to be completed July 30, 2023. The plan is to cut the liner around the stormwater catch basin and replace the catch basin with one that has fabricated pipe stub that will connect with the existing pipe for an improved fit. Once the new connection is complete with specified backfill, the liner will be replaced.