



Date: July 11, 2024

Jamie Nielsen Kentucky Department for Environmental Protection Director, Division of Waste Management 300 Sower Blvd Frankfort, KY 40601

Re: AI 3319, Selection of Remedy Report, Activity I.D. #AIN20140001

Dear Ms Nielsen,

Please accept this correspondence as formal notice that 40 C.F.R. 257.106(h)(9) notification of the availability of the first 2024 semi-annual Selection of Remedy Report for Wilson Phase II CCR Landfill in accordance with 40 C.F.R 257.97. This report is available on the Big Rivers website and the link shown below:

http://www.bigrivers.com/wp-content/uploads/2024/07/1H2024-Remedy-Selection-Progress-Report FINAL.pdf

If you have any questions, please contact Diana Merritt at 270-748-0565 or email diana.merritt@bigrivers.com.

"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 directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of true and imprisonment for such violations."

Best Regards,

Matt Granderson,

Plant Manager

Big Rivers Electric Corporation, D.B. Wilson Station



July 11, 2024

Mr. Mark Bertram
Big Rivers Electric Corporation
Administrative Services
Director Environmental Services
710 West 2nd Street
Owensboro, KY 42301

Re: 1st Half 2024 Remedy Selection Progress Report in accordance with 40 CFR

§257.97

D.B. Wilson Station Phase II CCR Landfill in Centertown, Kentucky

Agency Interest ID#: 3319

Dear Mr. Bertram:

On April 17, 2015 the final rule for the regulation and management of Coal Combustion Residuals (CCR) was published by the United States Environmental Protection Agency (USEPA) in 40 Code of Federal Regulations (CFR) §257 and §261 (herein referred to as the Final Rule). The Final Rule applies to the CCR landfill known as the *Phase II Landfill* located at the Big Rivers Electric Corporation (BREC) D.B. Wilson Station. The Phase II Landfill is currently in Assessment groundwater monitoring per 40 CFR §257.95 with Appendix IV constituents detected at concentrations representing statistically significant levels (SSLs) above groundwater protection standards (GWPS). In response to the Appendix IV constituents detected at SSLs above GWPSs, BREC completed an Assessment of Corrective Measures Report in accordance with 40 CFR §257.96. BREC must select a remedy for groundwater impacts that meets the standards in 40 CFR §257.97(b) and, in accordance with 40 CFR §257.97(a) "must prepare a semiannual report describing the progress in selecting and designing the remedy."

Overview

In October 2018, BREC installed five characterization monitoring wells located downgradient (MW-4D, MW-104, MW-105, and MW-110) or cross-gradient (MW-102) from the Phase I and Phase II Landfill in accordance with 40 CFR §257.95(g)(1) to further characterize the nature and extent of groundwater impacts. The closed Phase I Landfill is adjacent to the Phase II Landfill. The closed Phase I Landfill is regulated by a Special Waste permit issued by the Kentucky Department of Environmental Protection (KDEP), Division of Waste Management (DWM) under Title 401 of the Kentucky Administrative Regulations (KAR) Section 45 and is not regulated under the Final Rule.



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In accordance with 40 CFR §257.96 of the Final Rule, BREC submitted the *Assessment of Corrective Measures Report* to their publicly-accessible CCR reporting website on June 14, 2019 that considered six potential corrective action alternatives to address groundwater impacts. The report stated that the assembly of these potential corrective measure alternatives was preliminary and could be revised following detailed analysis during the remedy selection process. To further evaluate each alternative further and potentially consider other corrective action technologies and/or alternatives, additional data collection was required.

In December 2021 through January 2022, BREC installed six characterization monitoring wells (MW-10D, MW-105R, MW-111, MW-112, MW-113, and MW-114) located downgradient of the Phase I and Phase II Landfill locations. These additional characterization wells were installed in accordance with the DWM-approved Groundwater Assessment Plan (GWAP) for the Phase I Landfill under 401 KAR Chapter 45 Special Waste Section 160. However, the data generated during this groundwater assessment will be used to further support the evaluation of remedy selection for the groundwater impacts at the Phase II Landfill under the CCR Final Rule.

This report documents the progress made in the first half of 2024 (January 1, 2024 through June 30, 2024 in remedy selection. The activities accomplished during this period were focused on further characterization of groundwater at the Site.

Summary of 1st Half 2024 Actions Completed

The following activities have been completed to support evaluations required to select and design a groundwater remedy:

- The Spring (1st half) 2024 groundwater sampling event was completed in April 2024. This included the fifth groundwater sampling event for the six new characterization monitoring wells installed December 2021 through January 2022 in accordance with the Phase I Landfill GWAP.
- Groundwater analytical results from the Spring 2024 groundwater sampling event will be reported in the 2023 Annual Groundwater Monitoring and Corrective Action Report to be completed in January 2025.



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- This 1st Half 2024 Semiannual Remedy Selection Progress Report has been placed in the facility's operating record (40 CFR §257.105(h)(12).
- Notification to the DWM of the availability of this 1st Half 2024 Semiannual Remedy Selection Progress Report will be prepared (40 CFR §257.106(9) and the report will be posted to BREC's publicly-accessible CCR reporting website (40 CFR §257.107(h)(9)).

Conclusion

Due to additional data collection needs to fill data gaps based on the results from the GWAR and the six newly installed characterization wells being sampled for only the fifth time in April 2024, continued semiannual groundwater monitoring will be performed and a supplemental GWAP will be developed to improve the hydrogeologic characterization and nature and extent of groundwater. The supplemental GWAP will be prepared following review of the GWAR by DWM to address any potential comments.

The next semiannual groundwater monitoring event under the assessment monitoring program is scheduled for Fall 2024. The data generated from continued groundwater monitoring will be used to further characterize the nature and extent of CCR constituents in groundwater and will support the development of a comprehensive conceptual site model needed to assess the potential need for additional data collection and evaluate the selection and design of an appropriate remedy for the Phase II Landfill groundwater impacts. Identifying the Final Rule Appendix IV constituent(s) of interest and defining the magnitude of remedial actions is needed to properly evaluate, select, and design an appropriate remedy in accordance with 40 CFR §257.97.

Once sufficient hydrogeologic data has been collected to effectively evaluate and develop a comprehensive remedy for the Phase II Landfill groundwater impacts, a public meeting will be held 30 days prior to formal remedy selection (40 CFR §257.96(e)), followed by a detailed Remedy Selection Report describing the remedy and proposed schedule for implementation.



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The next semiannual remedy selection progress report documenting the activities performed from July 1, 2024 through December 31, 2024 for selecting the Phase II Landfill remedy is expected in January 2025.

Sincerely,

Burns & McDonnell Engineering Company, Inc.

Chris Hoglund, PG Project Manager

cc: Diana Merritt, Big Rivers Electric Corporation