MEMORANDUM

March 10, 2023
Project No. 27222162.00

To: Evergy Missouri West, Inc.
Jared Morrison – Director, Water and Waste Programs

From: SCS Engineers
John Rockhold, P.G.
Douglas Doerr, P.E.

RE: Semi-Annual Remedy Selection Progress Report Pursuant to 40 CFR 267.97(a)
Sibley Generating Station
Fly Ash Impoundment

Evergy Missouri West, Inc. has implemented the U.S. Environmental Protection Agency Federal Coal Combustion Residuals (CCR) Rule (Code of Federal Regulations 40 CFR 257 and 261) effective October 19, 2015, along with subsequent revisions for the CCR surface impoundment referred to as the Sibley Fly Ash Impoundment (FAI) at the Sibley Generating Station located in Sibley Missouri. Section 257.97(a) of the CCR Rule requires that the owner or operator of a CCR management unit which has completed an Assessment of Corrective Measures (ACM) for groundwater to prepare a semi-annual report describing the progress in selecting and designing the remedy. This report constitutes the first semi-annual remedy selection progress report and is comprised of activities during the period of September 2022 through February 2023.

The ACM was initiated for the FAI on April 18, 2022, in response to a statistically significant level (SSL) of an Appendix IV constituent (molybdenum) exceeding the Groundwater Protection Standards (GWPS). Pursuant to 40 CFR 257.96(a), a demonstration of need for a 60-day extension for the ACM was completed on July 15, 2022. The ACM Report was completed and placed in the facility operating record and posted to Evergy's CCR public website on September 15, 2022. Based on the results of the ACM, Evergy must, as soon as feasible in accordance with the CCR Rule, select a remedy that meets the standards listed in 40 CFR 257.97(b). A summary of the progress in selecting a remedy in compliance with the CCR Rule is provided below.

SUMMARY OF ACTIONS

The following actions have been completed during the initial reporting period (September 2022 through February 2023):

- Continued nature and extent (N&E) investigation of the Appendix IV constituent (molybdenum) in exceedance of the GWPS pursuant to 40 CFR 257.95(g). To properly determine the extent and concentration of molybdenum, additional groundwater data was needed. The initial groundwater samples collected from several of the N&E wells were collected within a couple of weeks following well installation and before the formational groundwater had time to equilibrate after the disturbance. Groundwater samples were collected from the N&E wells on February 13 and 14, 2023. Groundwater characterization of the N&E groundwater monitoring wells is ongoing.

Anticipated activities for the upcoming semi-annual corrective measures selection progress period (March 2023 through August 2023) include the following (subject to change):

- Continue Assessment Monitoring: An annual assessment sample was collected on February 13, 2023 and the first semi-annual sampling event will be completed in Spring of 2023. The groundwater data will be evaluated for SSLs compared to the GWPS. New constituents identified that exceed the GWPS will be considered in the selection of the final remedy.
- Continued groundwater level measurements and groundwater sampling to help establish baseline concentrations for the N&E monitoring wells.
- Continued efforts to establish N&E:
    - Evaluate the groundwater analytical data collected during the February 2023 annual sampling event that included the N&E monitoring wells; and
    - Continue development of geochemical evaluations.
- Continue evaluation of regulatory requirements listed under § 257.97 in support of selecting a remedy, including updated timelines, and required demonstration elements.
- Aquifer testing at several newly installed groundwater monitoring wells to provide additional information to support and/or refine the conceptual site model and potential associated groundwater modeling.
- Initiate an engineering review of the potential ACM treatment alternatives to fully evaluate corrective measures remedy selection. For these reviews, emphasis will be placed on understanding and investigating alternatives with respect to impacts of newly gathered analytical results, identifying, and researching applicability of emerging technologies. These technologies and methods will be evaluated based on their impacts on the ACM and selection of remedy process.
- Provide a semi-annual progress report that summarizes Evergy's progress and status regarding a selection of remedy.