MEMORANDUM

Revision 1: April 19, 2024
Original: October 12, 2017

Evergy Metro, Inc.
Montrose Generating Station
400 SW Highway P
Clinton, MO 64735

SUBJECT: Groundwater Monitoring System Certification
CCR Landfill, Montrose Generating Station

Evergy Metro, Inc. (Evergy) owns and operates the Montrose utility waste landfill near Montrose, Missouri. The CCR Landfill at the station is classified as a coal combustion residual (CCR) unit under the Coal Combustion Residuals Rule (Rule) published by the United States Environmental Protection Agency (US EPA) on April 17, 2015 (US EPA, 2015, 40 CFR Part 257 Subpart D) effective October 19, 2015, and subsequent revisions.

This document addresses the requirements of 40 CFR 257.91 Groundwater Monitoring Systems, specifically 257.91(f) of the Rule, requiring certification from a qualified professional engineer stating that the groundwater monitoring system is designed and constructed to meet the requirements of 40 CFR 257.91. As defined with this rule, the CCR units must have a groundwater monitoring system that consists of a sufficient number of wells, installed at appropriate locations and depths, to yield groundwater samples from the uppermost aquifer that accurately represent the quality of upgradient/background groundwater that has not been affected by leakage from a CCR unit; and that accurately represents the quality of groundwater passing the waste boundary of the CCR unit.

Revision 1 of the Groundwater Monitoring System Certification has been prepared to detail the inclusion of two additional upgradient/background wells into the groundwater monitoring system for the CCR Landfill. Additionally, the statistical methodology for evaluating groundwater monitoring data for the CCR Landfill has transitioned from intrawell prediction limits to interwell prediction limits. The original groundwater monitoring system certification included two upgradient/background wells and four downgradient/compliance wells. Evergy and SCS Engineers have determined that the addition of two more upgradient/background monitoring wells (MW-507 and MW-701) will better characterize and represent the upgradient/background groundwater quality and is preferred over the original groundwater monitoring system for the CCR Landfill at the Montrose Generating Station.

The monitoring wells and their gradient designations for the CCR Landfill groundwater monitoring system, as certified herein, are summarized below. This certification has been prepared based on information available in the facility Operating Record pursuant to § 257.91(e)(1).

CCR Landfill Groundwater Monitoring System

Groundwater Monitoring System	Upgradient Monitoring Wells	Downgradient Monitoring Wells
CCR Landfill	MW-506 MW-507 MW-601 MW-701	MW-602 MW-603 MW-604 MW-605

A groundwater monitoring system consisting of four upgradient/background wells and four downgradient/compliance wells was installed and are used to monitor the CCR Landfill. The number, spacing, and depths of monitoring wells in the groundwater monitoring system are based on site-specific technical information provided in the "*Detailed Hydrogeologic Site Characterization Report, CCR Landfill, Montrose Generating Station*" (AECOM, 2017) and subsequent work. The report identified and characterized the overlying geologic units, the uppermost aquifer, and the confining unit defining the lower boundary of the uppermost aquifer.

Based on the typical groundwater flow direction, the four upgradient/background monitoring wells are located to represent the quality of upgradient/background groundwater that has not been affected by potential leakage from the CCR landfill. The four downgradient/compliance monitoring wells are located at or as close as feasible to the waste boundary and screened in the uppermost aquifer to accurately represent the quality of groundwater passing the downgradient waste boundary of the CCR Landfill.

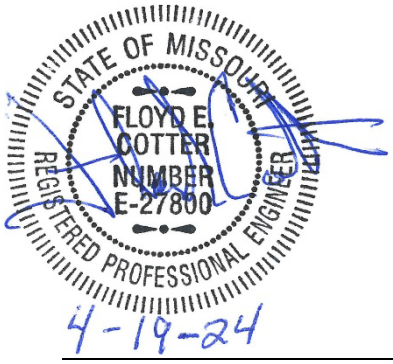
Limitations

SCS Engineers has been retained by Evergy Metro, Inc. to assess if the groundwater monitoring system meets the requirements of 40 CFR 257.91. The signature of the authorized representative on this document represents that to the best of his knowledge, information, and belief in the exercise of his professional judgment in accordance with the standard of practice, it is his professional opinion that the aforementioned information is accurate as of the date of such signature. Any opinions or decisions by him are made based on his experience, qualifications, and professional judgment and are not to be construed as warranties or guarantees. In addition, opinions relating to regulatory, environmental, geologic, and geotechnical conditions, interpretations, or other estimates are based on available data, and actual conditions may vary from those encountered at the times and locations where data are obtained, despite the use of due care.

Qualified Professional Engineer's Certification

I, Floyd Cotter, hereby certify that the groundwater monitoring system for the CCR Landfill at the Montrose Generating Station has been designed and constructed to meet the requirements of 40 CFR 257.91. This certification is based on my review of documentation provided by Evergy and documentation in the CCR operating record regarding the design, installation, and development of the groundwater monitoring system components and the standard of practice for waste

management unit groundwater monitoring. I am a duly licensed Professional Engineer under the laws of the State of Missouri.



Floyd Cotter, P.E.
SCS Engineers

Geologist's Certification

I, John R. Rockhold, hereby certify that the CCR Landfill monitoring system for the CCR Landfill at the Montrose Generating Station has been designed and constructed to meet the requirements of 40 CFR 257.91. This certification is based on my review of documentation provided by KCP&L and documentation in the CCR operating record regarding the design, installation, and development of the groundwater monitoring system components and the standard of practice for waste management unit groundwater monitoring. I am a duly licensed Registered Geologist under the laws of the State of Missouri.

John R. Rockhold, R.G.
SCS Engineers

Revision Number	Revision Date	Summary of Revisions
0	October 12, 2017	Original
1	April 19, 2024	Revised the groundwater monitoring system to include two additional upgradient/background wells MW-507 and MW 701 for the CCR Landfill.