# Sikeston Board of Municipal Utilities Sikeston Power Station – Fly Ash Pond Documentation of Monitoring Well Design, Installation & Development Federal CCR Rule Record Document for Compliance with 40 CFR 257.91(f) June 25, 2025

# **Groundwater Monitoring System for Fly Ash Pond**

The groundwater monitoring systems for the Fly Ash Pond are comprised of eight wells. The wells are identified as MW-1R, MW-2, MW-3, MW-4, MW-7, MW-9, MW-10, and NE-3 (Figure A). MW-2 and MW-3 are located hydraulically upgradient of the Fly Ash Pond whereas MW-1R, MW-4, MW-7, MW-9, MW-10, and NE-3 are located hydraulically downgradient of the Fly Ash Pond. Monitoring wells MW-2, MW-3, and MW-4 were installed on April 26 and 27, 2016; MW-7 was installed April 18, 2017; MW-9 was installed November 13, 2017; MW-1R, was installed on September 3, 2021; and NE-3 and MW-10 were installed February 9, 2023. MW-1R was installed closer to the Fly Ash Pond and replaced MW-1. MW-10 was installed as additional monitoring well at the facility boundary in the direction flow in accordance with 257.95(g)(1)(iii), and NE-3 was installed during the Nature and Extent characterization in 2023. Corrective action will be monitored with downgradient monitoring wells MW-1R, MW-4, MW-7, MW-9, MW-10, and NE-3.

All well construction activities were performed under the direction of a Registered Geologist in the State of Missouri. Well design and installation techniques were completed in accordance with 10 CSR 23-4, which is consistent with the standards summarized in 40 CFR 257.91(e). Well depths are between 30 and 35.5 feet below ground surface. All wells monitor uppermost groundwater, which is within the alluvial aquifer at the Fly Ash Pond site. Each well yields sufficient quantities of water for the purposes of sampling and analysis.

### **Professional Engineer's Certification**

## 40 CFR 257.91(f) Certification of Groundwater Monitoring System

I, Thomas R. Gredell, P.E., a professional engineer licensed in the State of Missouri, hereby certify in accordance with 40 CFR 257.91(f) that the groundwater monitoring system for the Sikeston Board of Municipal Utilities, Sikeston Power Station, Fly Ash Pond meets the requirements of 40 CFR 257.91 as found in federal regulation 40 CFR 257, Subpart D – Standards for the Disposal of Coal Combustion Residuals in Landfills and Surface Impoundments. In addition, the determination was made using recognized and generally accepted methods.

Name: Thomas R. Gredell, P.E.	1
Signature:	IAS R
Date: Registration Number: PE-02 137	MBER 021137 NAL ENGIN



LEGEND PROPERTY LINE MW MW-10 UP GRADIENT MONITORING LOCATION UG DOWN GRADIENT MONITORING LOCATION DG

- NOTES:

  1. IMAGE PROVIDED BY BING MAPS.
  2. MONITORING WELL LOCATIONS, CASING ELEVATIONS & UNDERGROUND CULVERT ELEVATIONS SURVEYED BY BOWEN ENGINEERING & SURVEYING.
  3. WELLS ARE EQUIPPED WITH A LOCKING PROTECTIVE COVER AND EXPANDABLE PLUG, THAT ONCE REMOVED WILL EXPOSE THE SURVEYED REFERENCE MARK (NOTCH OR BLACK MARK).

MONITORING WELL ID	CASING ELEVATION (FEET) <sup>3</sup>	NORTHING	EASTING
MW-1R	314.34	382926.45	1078801.61
MW-2	308.01	383207.42	1079751.30
MW-3	308.55	381130.00	1079946.62
MW-4	305.61	380804.62	1077766.95
MW-7	315.03	381584.50	1078847.00
MW-9	314.68	382429.94	1078825.60
MW-10	304.28	381324.39	1076261.22
NE-3	303.40	380948.04	1076602.42



SIKESTON POWER STATION FLY ASH POND GROUNDWATER MONITORING SYSTEM

FIGURE A MONITORING WELL LOCATION MAP