HALEY ALDRICH

www.haleyaldrich.com

2025 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT POND 003 NEW MADRID POWER PLANT MARSTON, MISSOURI

by
Haley & Aldrich, Inc.
Cleveland, Ohio

for
Associated Electric Cooperative, Inc.
Springfield, Missouri

File No. 211090-000
January 2026

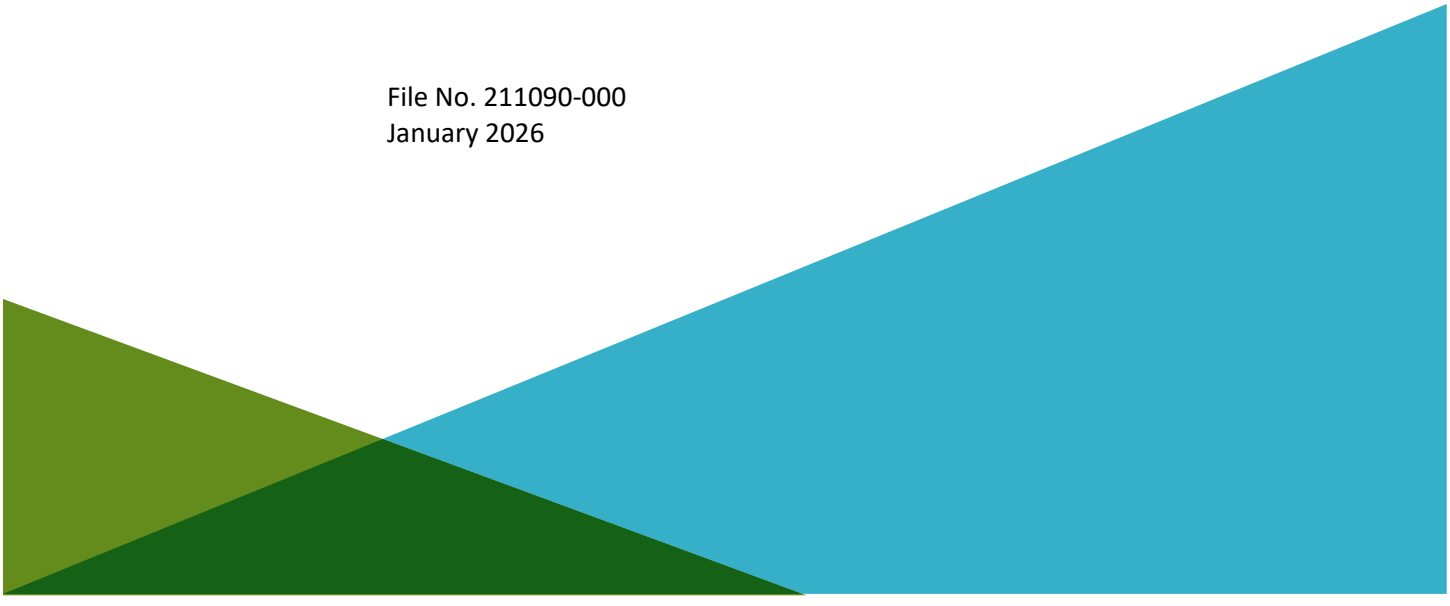


Table of Contents

Mark Nicholls, PG
Name

Signature

Principal Consultant
Title

January 30, 2026
Date

List of Tables

List of Figures

1. Introduction

This 2025 Annual Groundwater Monitoring and Corrective Action Report (Annual Report) addresses Pond 003 at the New Madrid Power Plant (NMPP), operated by the Associated Electric Cooperative, Inc. (AECI). This Annual Report was developed in accordance with the U.S. Environmental Protection Agency Coal Combustion Residual (CCR) Rule effective 19 October 2015 (Rule) including subsequent revisions, specifically Title 40 Code of Federal Regulations (40 CFR) § 257.90(e). The Annual Report documents the groundwater monitoring system for Pond 003 consistent with applicable sections of 40 CFR §§ 257.90 through 257.98, and describes activities conducted in the prior calendar year (2025) for compliance with the Rule. The specific requirements listed in 40 CFR § 257.90(e)(1) through (6) of the Rule are provided in Sections 1 and 2 of this Annual Report and are in bold italic font, followed by a short narrative describing how each Rule requirement has been met.

1.1 40 CFR § 257.90(e)(6) SUMMARY

A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit. At a minimum, the summary must specify all of the following:

1.1.1 40 CFR § 257.90(e)(6)(i) – Initial Monitoring Program

At the start of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in § 257.94 or the assessment monitoring program in § 257.95;

At the start of the current annual reporting period (January 1, 2025), Pond 003 was operating under an assessment monitoring program in compliance with 40 CFR § 257.95 for all constituents except molybdenum. Since July 2019, Pond 003 is in a corrective measures program in accordance with 40 CFR § 257.96 for molybdenum.

1.1.2 40 CFR § 257.90(e)(6)(ii) – Final Monitoring Program

At the end of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in § 257.94 or the assessment monitoring program in § 257.95;

At the end of the current annual reporting period (December 31, 2025), Pond 003 was operating under an assessment monitoring program in compliance with 40 CFR § 257.95 for all constituents except molybdenum. Pond 003 is implementing a corrective measures program in accordance with 40 CFR § 257.96 for molybdenum.

1.1.3 40 CFR § 257.90(e)(6)(iii) – Statistically Significant Increases

If it was determined that there was a statistically significant increase over background for one or more constituents listed in Appendix III to this part pursuant to § 257.94(e):

1.1.3.1 40 CFR § 257.90(e)(6)(iii)(A)

Identify those constituents listed in Appendix III to this part and the names of the monitoring wells associated with such an increase; and

Pond 003 at NMPP is operating under an assessment monitoring program. Therefore, no statistical evaluations were conducted for Appendix III constituents in 2025.

1.1.3.2 40 CFR § 257.90(e)(6)(iii)(B)

Provide the date when the assessment monitoring program was initiated for the CCR unit.

An assessment monitoring program for Pond 003 was established on August 15, 2018 to meet the requirements of 40 CFR § 257.95. Pond 003 remained in assessment monitoring in 2025 for all constituents except molybdenum. A corrective measures program implemented for molybdenum in accordance with 40 CFR § 257.96 was in place during 2025.

1.1.4 40 CFR § 257.90(e)(6)(iv) – Statistically Significant Levels

If it was determined that there was a statistically significant level above the groundwater protection standard for one or more constituents listed in Appendix IV to this part pursuant to § 257.95(g) include all of the following:

1.1.4.1 40 CFR § 257.90(e)(6)(iv)(A) – Statistically Significant Level Constituents

Identify those constituents listed in Appendix IV to this part and the names of the monitoring wells associated with such an increase;

Statistically significant levels (SSL) above the groundwater protection standards (GWPS) identified in 2025, following completion of statistical analyses in accordance with 40 CFR § 257.93 at Pond 003 for the August 2024 and February 2025 semiannual assessment monitoring sampling events, are listed in Table I. In 2025, statistical analyses were completed for semiannual sampling events in August 2024 and February 2025 based on the allowable timeframes to complete statistical analyses in accordance with 40 CFR § 257.93(h)(2). Although a semiannual sampling event was completed in September 2025, statistical analyses were not completed within the 2025 calendar year based on allowable timing to complete the statistical analyses in accordance with 40 CFR § 257.93(h)(2).

1.1.4.2 40 CFR § 257.90(e)(6)(iv)(B) – Initiation of the Assessment of Corrective Measures

Provide the date when the assessment of corrective measures was initiated for the CCR unit;

No assessment of corrective measures was required to be initiated in 2025 for this unit. The assessment of corrective measures for Pond 003 was initiated on July 3, 2019.

1.1.4.3 40 CFR § 257.90(e)(6)(iv)(C) – Assessment of Corrective Measures Public Meeting

Provide the date when the public meeting was held for the assessment of corrective measures for the CCR unit; and

The public meeting following the assessment of corrective measures was held on November 14, 2019. No new assessment of corrective measures was required to be initiated for Pond 003 in 2025. Therefore, a public meeting related to a new assessment of corrective measures was not held in 2025.

1.1.4.4 40 CFR § 257.90(e)(6)(iv)(D) – Completion of the Assessment of Corrective Measures

Provide the date when the assessment of corrective measures was completed for the CCR unit.

An assessment of corrective measures was completed on September 13, 2019 in accordance with 40 CFR § 257.96. No new assessment of corrective measures was required to be completed in 2025 for this unit.

1.1.5 40 CFR § 257.90(e)(6)(v) – Selection of Remedy

Whether a remedy was selected pursuant to § 257.97 during the current annual reporting period, and if so, the date of remedy selection; and

The selection of remedy required under 40 CFR § 257.97 was certified on March 29, 2023 for molybdenum at the select monitoring wells with SSLs at Pond 003. No new remedy selection was required to be completed in 2025 for this unit.

1.1.6 40 CFR § 257.90(e)(6)(vi) – Remedial Activities

Whether remedial activities were initiated or are ongoing pursuant to § 257.98 during the current annual reporting period.

Remedial activities were initiated within 90 days of selecting a remedy for molybdenum in accordance with 40 CFR § 257.97(a) and are ongoing. No new remedial activities were required to be initiated in 2025 for this unit.

2. 40 CFR § 257.90 Applicability

2.1 40 CFR § 257.90(a)

All CCR landfills, CCR surface impoundments, and lateral expansions of CCR units are subject to the groundwater monitoring and corrective action requirements under §§ 257.90 through 257.99, except as provided in paragraph (g) [Suspension of groundwater monitoring requirements] of this section.

AECI has installed and certified a groundwater monitoring system at the NMPP Pond 003. Pond 003 is subject to the groundwater monitoring and corrective action requirements described under 40 CFR §§ 257.90 through 257.98. This document addresses the requirement for the Owner/Operator to prepare an Annual Report per 40 CFR § 257.90(e) (Rule).

2.2 40 CFR § 257.90(e) – SUMMARY

Annual groundwater monitoring and corrective action report. For existing CCR landfills and existing CCR surface impoundments, no later than January 31, 2018, and annually thereafter, the owner or operator must prepare an annual groundwater monitoring and corrective action report. For new CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units, the owner or operator must prepare the initial annual groundwater monitoring and corrective action report no later than January 31 of the year following the calendar year a groundwater monitoring system has been established for such CCR unit as required by this subpart, and annually thereafter. For the preceding calendar year, the annual report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. For purposes of this section, the owner or operator has prepared the annual report when the report is placed in the facility's operating record as required by § 257.105(h)(1).

This Annual Report describes the groundwater monitoring activities completed and related actions taken at the NMPP Pond 003 as required by the Rule. Groundwater sampling and analysis was conducted in accordance with requirements described in 40 CFR § 257.93, and the status of the groundwater monitoring program described in 40 CFR § 257.94 and § 257.95 is also provided in this report. This Annual Report documents the applicable groundwater-related activities completed in the calendar year 2025.

2.2.1 Status of the Groundwater Monitoring Program

Results of the detection monitoring statistical analyses completed in January 2018 identified a statistically significant increased (SSI) concentration of Appendix III constituents in downgradient monitoring wells relative to concentrations observed in upgradient monitoring wells. No alternative source was identified for the SSI constituents. Accordingly, the groundwater monitoring program transitioned to assessment monitoring in May 2018. Appendix IV SSLs were detected above the GWPS for molybdenum during the October 2018 and March 2019 assessment monitoring sampling events. Therefore, a corrective measures assessment was initiated and completed in 2019. The selection of remedy required under 40 CFR § 257.97 was completed in March 2023 for molybdenum at Pond 003, and the implementation of the selected remedy has been initiated. AECI is currently implementing an assessment monitoring program for all other constituents.

2.2.2 Key Actions Completed

The 2024 Annual Groundwater Monitoring and Corrective Action Report was completed in January 2025. Statistical analysis of analytical data from the August 2024 semiannual assessment monitoring sampling event was completed in January 2025. A summary, including the sample names, sampling dates, field parameters, and monitoring data obtained for the groundwater monitoring program of the NMPP Pond 003 is presented in Table II of this report. The statistical analyses completed in January 2025 indicated Appendix IV SSLs above the GWPS for molybdenum at monitoring wells MW-7, MW-8, MW-9, P-2, P-3, and P-5 from the August 2024 sampling event.

A semiannual assessment monitoring event was completed in February 2025 for Appendix IV constituents detected during the May 2024 annual assessment monitoring sampling event. Statistical analysis was completed within 90 days of receipt of verified laboratory data for the February 2025 sampling event. Appendix IV SSLs were identified consistent with previous monitoring events for molybdenum. A summary of Appendix IV SSLs identified in the August 2024 and February 2025 assessment monitoring events are provided in Table I. Notifications documenting the identified SSLs have been entered into the facility operating record in accordance with 40 CFR § 257.95(g).

The determination of the nature and extent of the Appendix IV SSLs was initiated in 2019 pursuant to 40 CFR § 257.95(g) with the installation of 15 additional groundwater monitoring wells. Analytical results from the groundwater monitoring events completed at the nature and extent monitoring wells from February and August 2025 are provided in Table III.

An annual assessment monitoring sampling event was completed in June 2025 to identify detected Appendix IV constituents for subsequent semiannual sampling events in September 2025 and planned for March 2026. GWPSs for detected Appendix IV constituents were established. GWPSs utilized for the statistical analyses completed in 2025 for the August 2024 and February 2025 semiannual groundwater sampling events are shown on Table IV and Table V, respectively. Semiannual assessment monitoring was completed in September 2025 for Appendix IV constituents detected during the June 2025 annual monitoring event. Statistical analysis of the results from the September 2025 semiannual assessment monitoring sampling event are due to be completed in January 2026 and will be reported in the next calendar year annual report.

Remedial activities were initiated within 90 days of selecting a remedy in accordance with 40 CFR § 257.97(a) for molybdenum at Pond 003. Remedial activities for molybdenum at Pond 003 are ongoing.

2.2.3 Problems Encountered

Problems (i.e., problems could include damaged wells, issues with sample collection or lack of sampling, or problems with analytical analysis) encountered at the NMPP Pond 003 in 2025 are summarized below:

- At monitoring well MW-7, elevated constituent concentrations were observed during the February 2025 and September 2025 semiannual assessment monitoring sampling events. A verification sample was collected in April 2025 for the February 2025 results, and verification samples were collected in November and December 2025 for the September 2025 results. The analytical results were revised accordingly.

- Limited water volume in downgradient monitoring wells P-2, P-3, and P-4 caused difficulties collecting groundwater samples during the September 2025 semiannual groundwater sampling event. Groundwater elevations in monitoring wells P-2, P-3, and P-4 were monitored in subsequent weeks following the September 2025 groundwater sampling event. Samples were collected from monitoring wells P-2 and P-3 in late-September 2025; no sample was able to be collected from monitoring well P-4 due to insufficient water volume for sample collection.

2.2.4 Actions to Resolve Problems

Actions to resolve the problems encountered in 2025 include:

- Laboratory reanalysis of the groundwater samples from monitoring well MW-7 was completed, and verification samples were collected in April 2025 for the February 2025 groundwater monitoring sampling event, and in November and December 2025 for the September 2025 groundwater monitoring sampling event for select constituents, as described above. The analytical results were updated accordingly.
- AECI is considering replacement of monitoring wells P-2, P-3, and P-4 to address ongoing difficulties with insufficient water volume to support groundwater sampling. AECI will determine a path forward following the March 2025 semiannual assessment monitoring sampling event.

2.2.5 Project Key Activities for Upcoming Year

Key activities planned for 2026 include completion of the 2025 Annual Groundwater Monitoring and Corrective Action Report, statistical analysis of assessment monitoring analytical data collected in September 2025, completing an assessment monitoring annual sampling event, and conducting semiannual assessment monitoring sampling events and subsequent statistical analysis. AECI is also implementing initial steps of the selected remedy for molybdenum at Pond 003, which includes additional sampling criteria for select monitoring wells and evaluation of the need for additional monitoring wells to evaluate effectiveness of the selected remedy.

2.3 40 CFR § 257.90€ – INFORMATION

At a minimum, the annual groundwater monitoring and corrective action report must contain the following information, to the extent available:

2.3.1 40 CFR § 257.90(e)(1)

A map, aerial image, or diagram showing the CCR unit and all background (or up gradient) and down gradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR unit;

As required by 40 CFR § 257.90(e)(1), a map showing the locations of the CCR unit and associated upgradient and downgradient monitoring wells for Pond 003 is included in this report as Figure 1. In addition, this information is presented in the CCR Groundwater Monitoring Network Description Report prepared for AECI, which was placed in the facility operating record by October 17, 2017 as required by § 257.105(h)(2) and updated in April 2019. Monitoring wells installed to assist with the nature and extent investigation at Pond 003, along with monitoring wells installed to monitor the effectiveness of the selected remedy, are shown on Figure 2.

2.3.2 40 CFR § 257.90(e)(2) – Monitoring System Changes

Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken;

No monitoring wells were installed or decommissioned as part of the certified groundwater monitoring network during 2025.

2.3.3 40 CFR § 257.90(e)(3) – Summary of Sampling Events

In addition to all the monitoring data obtained under §257.90 through §257.98, a summary including the number of groundwater samples that were collected for analysis for each background and down gradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs;

In accordance with 40 CFR § 257.94(b), three independent assessment monitoring samples were collected from each background and downgradient monitoring well that are a part of the certified groundwater monitoring network in 2025. A summary including the sample names, dates of sample collection, field parameters, and monitoring data obtained for the groundwater monitoring program of the NMPP Pond 003 is presented in Table II of this report.

Two independent samples were collected from each nature and extent monitoring well in 2025 during the semiannual sampling events pursuant to 40 CFR § 257.95(g)(1)(iv) to support the evaluation of the selected remedy for molybdenum at Pond 003. Analytical results associated with the nature and extent investigation conducted in 2025 are reported in Table III.

2.3.4 40 CFR § 257.90(e)(4) – Monitoring Transition Narrative

A narrative discussion of any transition between monitoring programs (e.g., the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase over background levels); and

An assessment monitoring program was established on August 15, 2018 to meet the requirements of 40 CFR § 257.95. Statistical analyses of analytical data from October 2018 and March 2019 indicated Appendix IV SSLs above the GWPS for molybdenum at monitoring wells MW-7, MW-8, MW-9, P-2, P-3, and P-5. AECI pursued an ASD in April 2019 for molybdenum to determine if a source other than the CCR unit caused the SSL, which was unsuccessful. Therefore, a corrective measures assessment was initiated, which was completed in September 2019. The selection of remedy required under 40 CFR § 257.97 was completed in March 2023, and implementation of the selected remedy was initiated within 90 days of the selection of remedy. AECI is currently implementing an assessment monitoring program for all other Appendix IV constituents.

2.3.5 40 CFR § 257.90(e)(5) – Other Requirements

Other information required to be included in the annual report as specified in § 257.90 through § 257.98.

This Annual Report documents activities conducted to comply with 40 CFR §§ 257.90(e) of the Rule. It is understood that there are supplemental references in 40 CFR §§ 257.90 through 257.98 that must be placed in the Annual Report. The following requirements include relevant and required information in the Annual Report for activities completed in calendar year 2025.

2.3.5.1 40 CFR § 257.94(d)(3) – Demonstration for Alternative Detection Monitoring Frequency

The owner or operator must obtain a certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority stating that the demonstration for an alternative groundwater sampling and analysis frequency meets the requirements of this section. The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified professional engineer or the approval from the Participating State Director or approval from EPA where EPA is the permitting authority in the annual groundwater monitoring and corrective action report required by § 257.90(e).

An alternative groundwater detection monitoring sampling and analysis frequency has not been established for this CCR unit. Therefore, no demonstration or certification is applicable.

2.3.5.2 40 CFR § 257.94(e)(2) – Detection Monitoring Alternate Source Demonstration

The owner or operator may demonstrate that a source other than the CCR unit caused the statistically significant increase over background levels for a constituent or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. The owner or operator must complete the written demonstration within 90 days of detecting a statistically significant increase over background levels to include obtaining a certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority verifying the accuracy of the information in the report. If a successful demonstration is completed within the 90-day period, the owner or operator of the CCR unit may continue with a detection monitoring program under this section. If a successful demonstration is not completed within the 90-day period, the owner or operator of the CCR unit must initiate an assessment monitoring program as required under § 257.95. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by § 257.90(e), in addition to the certification by a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority.

This unit is in assessment monitoring. Therefore, no detection monitoring ASD or certification is applicable.

2.3.5.3 40 CFR § 257.95(c)(3) – Demonstration for Alternative Assessment Monitoring Frequency

The owner or operator must obtain a certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority stating that the demonstration for an alternative groundwater sampling and analysis frequency meets the requirements of this section. The owner or operator must include the demonstration providing the basis for the alternative monitoring frequency and the certification by a qualified professional engineer or the approval from the Participating State Director or approval from EPA where EPA is the

permitting authority in the annual groundwater monitoring and corrective action report required by § 257.90(e).

An alternative groundwater assessment monitoring sampling and analysis frequency has not been established for this CCR unit. Therefore, no demonstration or certification is applicable.

2.3.5.4 40 CFR § 257.95(d)(3) – Assessment Monitoring Concentrations and Groundwater Protection Standards

Include the recorded concentrations required by paragraph (d)(1) of this section, identify the background concentrations established under § 257.94(b), and identify the groundwater protection standards established under paragraph (d)(2) of this section in the annual groundwater monitoring and corrective action report required by § 257.90(e).

An assessment monitoring program is currently being implemented at the CCR unit. Three rounds of assessment monitoring sampling were completed in 2025. Analytical results for both downgradient and upgradient compliance wells are provided in Table II. The background concentrations (upper tolerance limits) and GWPS values established for the NMPP Pond 003 that were applied to statistical analyses completed in 2025 on the August 2024 and February 2025 analytical results are included in Table IV and Table V, respectively.

2.3.5.5 40 CFR § 257.95(g)(3)(ii) – Assessment Monitoring Alternate Source Demonstration

Demonstrate that a source other than the CCR unit caused the contamination, or that the statistically significant increase resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. Any such demonstration must be supported by a report that includes the factual or evidentiary basis for any conclusions and must be certified to be accurate by a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority. If a successful demonstration is made, the owner or operator must continue monitoring in accordance with the assessment monitoring program pursuant to this section and may return to detection monitoring if the constituents in appendices III and IV to this part are at or below background as specified in paragraph (e) of this section. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by § 257.90(e), in addition to the certification by a qualified professional engineer or the approval from the Participating State Director or approval from EPA where EPA is the permitting authority.

An alternate source was not identified for molybdenum SSLs identified in 2025 at Pond 003; therefore, no ASD or certification is applicable. Pond 003 remained in assessment monitoring during 2025 for all constituents other than molybdenum.

2.3.5.6 40 CFR § 257.96(a) – Demonstration for Additional Time for Assessment of Corrective Measures

Within 90 days of finding that any constituent listed in Appendix IV to this part has been detected at a statistically significant level exceeding the groundwater protection standard defined under § 257.95(h), or immediately upon detection of a release from a CCR unit, the owner or operator must initiate an assessment of corrective measures to prevent further releases, to remediate any releases

and to restore affected area to original conditions. The assessment of corrective measures must be completed within 90 days, unless the owner or operator demonstrates the need for additional time to complete the assessment of corrective measures due to site-specific conditions or circumstances. The owner or operator must obtain a certification from a qualified professional engineer or approval from the Participating State Director or approval from EPA where EPA is the permitting authority attesting that the demonstration is accurate. The 90-day deadline to complete the assessment of corrective measures may be extended for no longer than 60 days. The owner or operator must also include the demonstration in the annual groundwater monitoring and corrective action report required by § 257.90(e), in addition to the certification by a qualified professional engineer or the approval from the Participating State Director or approval from EPA where EPA is the permitting authority.

A new assessment of corrective measures was not required to be initiated in 2025. Therefore, no demonstration or certification is applicable for this unit.

2.4 40 CFR § 257.90(f)

The owner or operator of the CCR unit must comply with the recordkeeping requirements specified in § 257.105(h), the notification requirements specified in § 257.106(h), and the internet requirements specified in § 257.107(h).

In order to comply with the Rule recordkeeping requirements, the following actions must be completed:

- Pursuant to 40 CFR § 257.105(h)(1), this Annual Report must be placed in the facility operating record.
- Pursuant to 40 CFR § 257.106(h)(1), notification must be sent to the relevant State Director and/or Tribal authority within 30 days of this Annual Report being placed on the facility operating record [40 CFR § 257.106(d)].
- Pursuant to 40 CFR § 257.107(h)(1), this Annual Report must be posted to the AECI CCR website within 30 days of this Annual Report being placed on the facility operating record [40 CFR § 257.107(d)].

TABLES

TABLE I
SSL SUMMARY TABLE
ASSOCIATED ELECTRIC COOPERATIVE, INC.
NEW MADRID POWER PLANT - POND 003
MARSTON, MISSOURI

Constituent	Sampling Event	Well ID	Groundwater Protection Standard (mg/L)
Molybdenum	August 2024	MW-7	0.100*
		MW-8	
		MW-9	
		P-2	
		P-3	
		P-5	
	February 2024	MW-7	
		MW-8	
		MW-9	
		P-2	
		P-3	
		P-5	

Notes:

** Value obtained from U.S. Environmental Protection Agency Federal CCR Rule Title 40 Code of Federal Regulations § 257.95(h)(2)*

mg/L = milligrams per liter

SSL = statistically significant level

TABLE II
SUMMARY OF ANALYTICAL RESULTS - 2025 ASSESSMENT MONITORING
ASSOCIATED ELECTRIC COOPERATIVE, INC.
NEW MADRID POWER PLANT - POND 003
MARSTON, MISSOURI

Location	Upgradient									Downgradient		
	B-123	B-123	B-123	B-126	B-126	B-126	MW-16	MW-16	MW-16	MW-6	MW-6 DUPLICATE	MW-6
Measure Point (TOC)	292.70	292.70	292.70	293.63	293.63	293.63	292.85	292.85	292.85	300.27	300.27	300.27
Sample Name	B-123	B-123	B-123	B-126	B-126	B-126	MW-16	MW-16	MW-16	MW-6	DUP-P3-02-2025	MW-6
Sample Date	2/3/2025	5/7/2025	9/4/2025	2/3/2025	5/7/2025	9/4/2025	2/4/2025	5/7/2025	9/3/2025	2/13/2025	2/13/2025	5/8/2025
Final Lab Report Date	2/25/2025	5/31/2025	10/20/2025	2/25/2025	5/31/2025	10/20/2025	2/25/2025	5/31/2025	10/20/2025	3/10/2025	3/10/2025	5/31/2025
Final Lab Report Revision Date	N/A	7/23/2025	-	N/A	7/23/2025	-	N/A	7/23/2025	-	4/14/2025	4/14/2025	7/23/2025
Final Radiation Lab Report Date	2/25/2025	5/23/2025	10/27/2025	2/25/2025	5/23/2025	10/27/2025	2/25/2025	5/23/2025	10/27/2025	3/10/2025	3/10/2025	5/31/2025
Lab Data Reviewed and Accepted	5/15/2025	8/19/2025	12/23/2025	5/15/2025	8/19/2025	12/23/2025	5/15/2025	8/19/2025	12/23/2025	5/15/2025	5/15/2025	8/19/2025
Depth to Water (ft btoc)	23.47	22.09	22.10	27.36	23.70	22.60	30.50	19.34	24.98	35.25	35.25	24.15
Temperature (Deg C)	16.88	17.44	17.28	18.42	17.41	18.78	16.67	17.47	20.72	17.05	-	18.08
Conductivity, Field (µS/cm)	687	707	641	1	511	570	776	828	718	895	-	813
Turbidity, Field (NTU)	10.6	64.7	95.3	14.8	14	5.9	0.0	0.0	0	10.0	-	0.0
pH (field) (su)	6.89	5.44	6.76	6.65	5.64	6.61	6.75	6.63	7.17	6.66	-	5.89
Dissolved Oxygen, Field (mg/L)	0.46	5.44	0.00	0.51	0.00	0.00	0.46	0.19	0.00	0.1	-	0.06
ORP, Field (mV)	41	-8	-84	306	205	42	-85	-131	-90	263	-	71
Boron, Total (mg/L)	**0.035**	-	**0.030**	**0.038**	-	**0.037**	**0.057**	-	**0.050**	**0.32**	**0.28**	
Calcium, Total (mg/L)	**76**	-	**79**	**53**	-	**86**	**110**	-	**110**	**120**	**120**	
Chloride (mg/L)	**3.5**	-	**3.8**	**4.3**	-	**5.2**	**7.9**	-	**7.7**	**7.2**	**7.2**	
Fluoride (mg/L)	**0.460**	**0.486**	**0.537**	**0.414**	**0.452**	**0.251**	**0.882**	**1.39**	**0.888**	**0.685**	**0.684**	**0.619**
Sulfate (mg/L)	**24**	-	**24**	**33**	-	**15**	**74**	-	**52**	**83**	**86**	
pH (lab) (su)	**7.17**	-	**7.08**	**6.63**	-	**7.13**	**6.90**	-	**7.06**	**7.10**	**7.20**	
TDS (mg/L)	**340**	-	**380**	**340**	-	**350**	**420**	-	**380**	**480**	**490**	
Antimony, Total (mg/L)	< 0.0030	< 0.0030	-	< 0.0030	< 0.0030	-	< 0.0030	< 0.0030	-	-	-	< 0.0030
Arsenic, Total (mg/L)	**0.0029**	**0.0011**	**0.0054**	**0.0010**	**0.0013**	**0.0014**	**0.0022**	**0.0025**	**0.0011**	< 0.0010	< 0.0010	< 0.0010
Barium, Total (mg/L)	**0.19**	**0.16**	**0.30**	**0.21**	**0.20**	**0.44**	**0.51**	**0.49**	**0.50**	**0.13**	**0.13**	**0.14**
Beryllium, Total (mg/L)	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-	-	-	< 0.0010
Cadmium, Total (mg/L)	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-	-	-	< 0.0010
Chromium, Total (mg/L)	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cobalt, Total (mg/L)	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	**0.0022**	< 0.0020
Lead, Total (mg/L)	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-	-	-	< 0.0010
Lithium, Total (mg/L)	**0.025**	**0.024**	**0.025**	< 0.020	**0.012**	< 0.020	< 0.020	**0.020**	< 0.020	**0.014**	**0.014**	**0.015**
Mercury, Total (mg/L)	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Molybdenum, Total (mg/L)	**0.0034**	**0.0041**	**0.0042**	< 0.0010	**0.0014**	**0.0017**	< 0.0010	< 0.0010	**0.0013**	**0.031**	**0.030**	**0.043**
Selenium, Total (mg/L)	< 0.0010	< 0.0010	< 0.0010	**0.0022**	**0.0017**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Thallium, Total (mg/L)	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-	-	-	< 0.0010
Radium 226 & 228 Combined (pCi/L)	**1.95 ± 0.943 (0.499)**	**1.01 ± 0.620 (0.838)**	**1.48 ± 0.580 (0.622)**	-	**0.849 ± 0.579 (0.731)**	**1.41 ± 0.539 (0.589)**	**2.19 ± 1.204 (0.848)**	1.32 ± 0.992 (1.34)	**1.86 ± 0.683 (0.615)**	**0.724 ± 0.716 (0.515)**	**0.857 ± 0.634 (0.522)**	**2.37 ± 0.798 (0.770)**

Notes:

*** = Results not analyzed due to insufficient water in well*

***P-4 not sampled in September 2025 due to low water levels*

Bold value: *Detection above laboratory reporting limit or minimum detectable concentration (MDC).*

Radiological results are presented as activity plus or minus uncertainty with MDC.

µS/cm = micro Siemens per centimeter

Deg C = degrees Celsius

ft btoc = feet below top of casing

mg/L = milligrams per liter

N/A = Not Applicable

NTU = Nephelometric Turbidity Unit

pCi/L = picoCuries per liter

su = standard unit

TDS = total dissolved solids

TOC = top of casing

TABLE II
SUMMARY OF ANALYTICAL RESULTS - 2025 ASSESSMENT MONITORING
ASSOCIATED ELECTRIC COOPERATIVE, INC.
NEW MADRID POWER PLANT - POND 003
MARSTON, MISSOURI

Location	Downgradient												
	MW-6	MW-6 DUPLICATE	MW-7	MW-7 RESAMPLE	MW-7	MW-7	MW-7 RESAMPLE	MW-7 RESAMPLE	MW-8	MW-8	MW-8	MW-9	MW-9
Measure Point (TOC)	300.27	300.27	301.50	301.50	301.50	301.50	301.50	301.50	310.63	310.63	310.63	310.24	310.24
Sample Name	MW-6	DUP-P3-09-2025	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-8	MW-8	MW-8	MW-9	MW-9
Sample Date	9/9/2025	9/9/2025	2/13/2025	4/1/2025	5/8/2025	9/9/2025	11/24/2025	12/12/2025	2/7/2025	5/7/2025	9/8/2025	2/7/2025	5/7/2025
Final Lab Report Date	10/27/2025	10/27/2025	3/10/2025	4/10/2025	5/31/2025	10/27/2025	12/9/2025	12/18/2025	2/28/2025	5/31/2025	10/20/2025	2/28/2025	5/31/2025
Final Lab Report Revision Date	-	-	4/14/2025	N/A	7/23/2025	-	-	-	N/A	7/23/2025	-	N/A	7/23/2025
Final Radiation Lab Report Date	10/27/2025	10/27/2025	3/10/2025	N/A	5/31/2025	10/27/2025	-	-	3/10/2025	5/23/2025	10/27/2025	3/10/2025	5/23/2025
Lab Data Reviewed and Accepted	1/21/2026	1/21/2026	5/15/2025	5/15/2025	8/19/2025	1/21/2026	1/21/2026	1/21/2026	5/15/2025	8/19/2025	12/23/2025	5/15/2025	8/19/2025
Depth to Water (ft btoc)	36.50	36.50	38.69	30.47	24.95	35.07	42.85	42.77	47.72	33.95	43.94	47.27	33.11
Temperature (Deg C)	18.99	-	16.38	17.34	17.54	18.86	16.29	15.86	16.94	17.50	20.31	16.93	17.61
Conductivity, Field (µS/cm)	845	-	637	701	753	1070	1050	850	865	837	995	808	917
Turbidity, Field (NTU)	0.0	-	10.2	7.6	0.0	0.0	0.0	0.0	9.7	8.0	3.8	0.0	0.0
pH (field) (su)	6.64	-	6.43	6.61	5.49	6.21	6.40	6.94	6.81	6.78	6.72	7.12	6.95
Dissolved Oxygen, Field (mg/L)	0.00	-	0.00	0.00	4.24	0.00	1.05	0.85	0.07	0.00	3.02	0.01	0.00
ORP, Field (mV)	287	-	134	182	73	85	217	244	-82	-118	-6	-50	-110
Boron, Total (mg/L)	**0.34**	**0.37**	**4.2**	-		**1.7**	-	-	**4.3**		**6.5**	**5.3**	
Calcium, Total (mg/L)	**120**	**120**	**96**	-		**160**	-	-	**140**		**140**	**120**	
Chloride (mg/L)	< 1.0	< 1.0	**18**	-		**2.7**	-	-	**9.1**		**8.5**	**17**	
Fluoride (mg/L)	**0.375**	**0.368**	**0.354**	-	**0.355**	**0.300**	-	-	**0.272**	< 0.250	< 0.250	**0.738**	**0.552**
Sulfate (mg/L)	**31**	**32**	**110**	-		**99**	-	-	**64**		**80**	**160**	
pH (lab) (su)	**6.86**	**7.51**	**6.89**	-		**6.63**	-	-	**7.28**		**7.09**	**7.50**	
TDS (mg/L)	**450**	**390**	**440**	-		**610**	-	-	**520**		**550**	**560**	
Antimony, Total (mg/L)			-	-	< 0.0030				-	< 0.0030		-	< 0.0030
Arsenic, Total (mg/L)	< 0.0010	< 0.0010	**0.0039**	-	**0.0024**	**0.0030**	-	-	**0.0065**	**0.0071**	**0.0047**	**0.0018**	< 0.0010
Barium, Total (mg/L)	**0.16**	**0.15**	**0.087**	-	**0.099**	**0.13**	-	-	**0.14**	**0.13**	**0.16**	**0.081**	**0.086**
Beryllium, Total (mg/L)			-	-	< 0.0010				-	< 0.0010		-	< 0.0010
Cadmium, Total (mg/L)	< 0.0010	< 0.0010	-	-	< 0.0010	< 0.0010	-	-	-	< 0.0010	-	-	< 0.0010
Chromium, Total (mg/L)	< 0.0040	< 0.0040	< 0.0040	-	< 0.0040	< 0.0040	-	-	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cobalt, Total (mg/L)	< 0.0020	< 0.0020	**0.0069**	**0.0060**	**0.0070**	**0.010**	**0.0072**	**0.0071**	**0.0041**	**0.0026**	**0.0037**	**0.0023**	< 0.0020
Lead, Total (mg/L)			-	-	< 0.0010				-	< 0.0010		-	< 0.0010
Lithium, Total (mg/L)	< 0.020	< 0.020	**0.015**	-	**0.018**	**0.022**	-	-	< 0.020	**0.014**	< 0.020	< 0.020	**0.020**
Mercury, Total (mg/L)	-	-	< 0.00020	-	< 0.00020	-	-	-	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Molybdenum, Total (mg/L)	**0.0064**	**0.0070**	**1.0**	-	**1.3**	**1.3**	-	-	**0.31**	**0.34**	**0.43**	**0.43**	**0.41**
Selenium, Total (mg/L)	< 0.0010	< 0.0010	< 0.0010	-	**0.039**	**0.037**	-	-	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Thallium, Total (mg/L)	-	-	-	-	< 0.0010	-	-	-	-	< 0.0010	-	-	< 0.0010
Radium 226 & 228 Combined (pCi/L)	**1.30 ± 0.543 (0.656)**	**1.13 ± 0.613 (0.795)**	**0.971 ± 0.566 (0.443)**	-	**1.45 ± 0.613 (0.593)**	**2.19 ± 0.679 (0.774)**	-	-	**1.61 ± 0.982 (0.964)**	**0.851 ± 0.531 (0.628)**	**1.65 ± 0.555 (0.652)**	0.809 ± 0.863 (0.859)	0.233 ± 0.462 (0.688)

Notes:

*** = Results not analyzed due to insufficient water in well*

***P-4 not sampled in September 2025 due to low water levels*

Bold value: *Detection above laboratory reporting limit or minimum detectable concentration (MDC).*

Radiological results are presented as activity plus or minus uncertainty with MDC.

µS/cm = micro Siemens per centimeter

Deg C = degrees Celsius

ft btoc = feet below top of casing

mg/L = milligrams per liter

N/A = Not Applicable

NTU = Nephelometric Turbidity Unit

pCi/L = picoCuries per liter

su = standard unit

TDS = total dissolved solids

TOC = top of casing

TABLE II
SUMMARY OF ANALYTICAL RESULTS - 2025 ASSESSMENT MONITORING
ASSOCIATED ELECTRIC COOPERATIVE, INC.
NEW MADRID POWER PLANT - POND 003
MARSTON, MISSOURI

Location	Downgradient											
	MW-9	P-1	P-1	P-1	P-2	P-2	P-2 (Duplicate)	P-2	P-3	P-3	P-3	P-4
Measure Point (TOC)	310.24	313.35	313.35	313.35	309.84	309.84	309.84	309.84	310.72	310.72	310.72	311.07
Sample Name	MW-9	P-1	P-1	P-1	P-2	P-2	DUP-POND3-MAY25	P-2	P-3	P-3	P-3	P-4
Sample Date	9/8/2025	2/7/2025	5/7/2025	9/8/2025	2/7/2025	5/7/2025	5/7/2025	9/29/2025	2/7/2025	5/7/2025	9/29/2025	2/7/2025
Final Lab Report Date	10/20/2025	2/25/2025	5/31/2025	10/27/2025	2/25/2025	5/31/2025	5/31/2025	10/27/2025	2/25/2025	5/31/2025	10/27/2025	2/25/2025
Final Lab Report Revision Date	-	N/A	7/23/2025	-	N/A	7/23/2025	7/23/2025	-	N/A	7/23/2025	-	N/A
Final Radiation Lab Report Date	10/27/2025	3/11/2025	5/23/2025	10/27/2025	3/11/2025	5/23/2025	5/23/2025	11/6/2025	3/11/2025	5/23/2025	11/6/2025	3/11/2025
Lab Data Reviewed and Accepted	12/23/2025	5/15/2025	8/19/2025	1/21/2026	5/15/2025	8/19/2025	8/19/2025	1/21/2026	5/15/2025	8/19/2025	1/21/2026	5/15/2025
Depth to Water (ft btoc)	45.87	47.63	37.26	55.03	44.17	33.65	33.65	51.96	45.42	34.25	52.23	44.80
Temperature (Deg C)	18.68	18	18.94	20.89	19.01	19.77	-	27.56	17.00	18.81	22.06	17.04
Conductivity, Field (µS/cm)	914	893	1100	1080	985	1100	-	1180	918	1030	1090	837
Turbidity, Field (NTU)	0.0	1.5	0.0	0.0	0.0	0.0	-	21.5	1.7	0.0	3.8	9.8
pH (field) (su)	6.93	6.93	6.74	6.94	6.97	6.88	-	7.41	6.80	7.27	7.42	6.88
Dissolved Oxygen, Field (mg/L)	0.58	5.69	5.54	0.00	8.50	8.43	-	3.56	3.46	5.43	2.27	4.18
ORP, Field (mV)	-109	244	-10	-18	279	175	-	207	288	175	195	292
Boron, Total (mg/L)	**4.0**	**1.5**		**1.6**	**2.2**			**2.5**	**7.4**		**7.4**	**0.65**
Calcium, Total (mg/L)	**110**	**140**		**170**	**140**			**160**	**160**		**170**	**120**
Chloride (mg/L)	**15**	**21**		**14**	**19**			**11**	**15**		**14**	**19**
Fluoride (mg/L)	**0.579**	**0.508**	**0.331**	**0.294**	**0.560**	**0.495**	**0.490**	**0.416**	**0.616**	**0.673**	**0.564**	**0.367**
Sulfate (mg/L)	**150**	**170**		**210**	**270**			**320**	**120**		**150**	**140**
pH (lab) (su)	**7.26**	**7.03**		**7.17**	**7.15**			**7.17**	**7.1**		**1.50**	**7.17**
TDS (mg/L)	**500**	**610**		**740**	**680**			**780**	**590**		**2900**	**540**
Antimony, Total (mg/L)		< 0.003	< 0.0030		< 0.003	< 0.0030	< 0.0030		< 0.003	< 0.0030		< 0.003
Arsenic, Total (mg/L)	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Barium, Total (mg/L)	**0.086**	**0.063**	**0.075**	**0.072**	**0.074**	**0.083**	**0.082**	**0.086**	**0.10**	**0.10**	**0.11**	**0.15**
Beryllium, Total (mg/L)		< 0.001	< 0.0010		< 0.001	< 0.0010	< 0.0010		< 0.001	< 0.0010		< 0.001
Cadmium, Total (mg/L)	-	< 0.001	< 0.0010	< 0.0010	< 0.001	< 0.0010	< 0.0010	-	< 0.001	< 0.0010	-	< 0.001
Chromium, Total (mg/L)	< 0.0040	**0.028**	**0.0046**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cobalt, Total (mg/L)	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Lead, Total (mg/L)		< 0.001	< 0.0010		< 0.001	< 0.0010	< 0.0010		< 0.001	< 0.0010		< 0.001
Lithium, Total (mg/L)	**0.021**	< 0.020	**0.021**	**0.023**	< 0.020	**0.017**	**0.018**	< 0.020	< 0.020	**0.020**	**0.023**	**0.027**
Mercury, Total (mg/L)	< 0.00020	< 0.00020	< 0.00020	-	< 0.00020	< 0.00020	< 0.00020	-	< 0.00020	< 0.00020	-	< 0.00020
Molybdenum, Total (mg/L)	**0.35**	**0.043**	**0.012**	**0.023**	**0.29**	**0.23**	**0.23**	**0.30**	**0.69**	**0.86**	**1.1**	**0.016**
Selenium, Total (mg/L)	**0.0016**	< 0.001	**0.0082**	**0.0022**	**0.0052**	**0.0021**	**0.0022**	**0.023**	**0.0044**	**0.011**	**0.0047**	**0.018**
Thallium, Total (mg/L)	-	< 0.001	< 0.0010	< 0.0010	< 0.001	< 0.0010	< 0.0010	-	< 0.001	< 0.0010	-	< 0.001
Radium 226 & 228 Combined (pCi/L)	**2.88 ± 0.917 (0.634)**	**1.03 ± 0.859 (0.762)**	0.491 ± 0.505 (0.631)	**1.48 ± 0.706 (0.803)**	0.200 ± 0.820 (0.857)	0.756 ± 0.600 (0.718)	0.610 ± 0.469 (0.606)	0.623 ± 0.678 (1.01)	0.356 ± 0.921 (0.999)	**2.45 ± 0.861 (0.598)**	0.794 ± 0.745 (0.981)	0.130 ± 0.946 (1.03)

Notes:

*** = Results not analyzed due to insufficient water in well*

***P-4 not sampled in September 2025 due to low water levels*

Bold value: *Detection above laboratory reporting limit or minimum detectable concentration (MDC).*

Radiological results are presented as activity plus or minus uncertainty with MDC.

µS/cm = micro Siemens per centimeter

Deg C = degrees Celsius

ft btoc = feet below top of casing

mg/L = milligrams per liter

N/A = Not Applicable

NTU = Nephelometric Turbidity Unit

pCi/L = picoCuries per liter

su = standard unit

TDS = total dissolved solids

TOC = top of casing

TABLE II
SUMMARY OF ANALYTICAL RESULTS - 2025 ASSESSMENT MONITORING
ASSOCIATED ELECTRIC COOPERATIVE, INC.
NEW MADRID POWER PLANT - POND 003
MARSTON, MISSOURI

Location	Downgradient			
	P-4	P-5	P-5	P-5
Measure Point (TOC)	311.07	301.97	301.97	301.97
Sample Name	P-4	P-5	P-5	P-5
Sample Date	5/7/2025	2/13/2025	5/8/2025	9/9/2025
Final Lab Report Date	5/31/2025	3/10/2025	5/31/2025	10/27/2025
Final Lab Report Revision Date	7/23/2025	4/14/2025	7/23/2025	-
Final Radiation Lab Report Date	5/23/2025	3/10/2025	5/31/2025	10/27/2025
Lab Data Reviewed and Accepted	8/19/2025	5/15/2025	8/19/2025	1/21/2026
Depth to Water (ft btoc)	31.70	38.30	25.52	34.80
Temperature (Deg C)	17.03	15.66	16.60	18.24
Conductivity, Field (µS/cm)	1130	966	886	906
Turbidity, Field (NTU)	0.0	1.6	0.0	6.9
pH (field) (su)	7.43	6.47	5.41	6.22
Dissolved Oxygen, Field (mg/L)	3.54	0.00	0.14	0.00
ORP, Field (mV)	208	-68	-68	-71
Boron, Total (mg/L)		**4.1**		**4.0**
Calcium, Total (mg/L)		**130**		**130**
Chloride (mg/L)		**11**		**8.8**
Fluoride (mg/L)	**0.353**	**0.270**	< 0.250	< 0.250
Sulfate (mg/L)		**110**		**110**
pH (lab) (su)		**7.01**		**6.76**
TDS (mg/L)		**540**		**540**
Antimony, Total (mg/L)	< 0.0030	-	< 0.0030	
Arsenic, Total (mg/L)	< 0.0010	**0.0054**	**0.0066**	**0.0048**
Barium, Total (mg/L)	**0.086**	**0.11**	**0.12**	**0.11**
Beryllium, Total (mg/L)	< 0.0010	-	< 0.0010	
Cadmium, Total (mg/L)	< 0.0010	-	< 0.0010	< 0.0010
Chromium, Total (mg/L)	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cobalt, Total (mg/L)	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Lead, Total (mg/L)	< 0.0010	-	< 0.0010	
Lithium, Total (mg/L)	**0.028**	**0.015**	**0.017**	< 0.020
Mercury, Total (mg/L)	< 0.00020	< 0.00020	< 0.00020	-
Molybdenum, Total (mg/L)	**0.026**	**0.27**	**0.29**	**0.26**
Selenium, Total (mg/L)	**0.017**	< 0.0010	< 0.0010	< 0.0010
Thallium, Total (mg/L)	< 0.0010	-	< 0.0010	-
Radium 226 & 228 Combined (pCi/L)	0.462 ± 0.645 (0.857)	**1.14 ± 0.688 (0.488)**	**1.48 ± 0.650 (0.569)**	**2.11 ± 0.613 (0.795)**

Notes:

*** = Results not analyzed due to insufficient water in well*

***P-4 not sampled in September 2025 due to low water levels*

Bold value: *Detection above laboratory reporting limit or minimum detectable concentration (MDC).*

Radiological results are presented as activity plus or minus uncertainty with MDC.

µS/cm = micro Siemens per centimeter

Deg C = degrees Celsius

ft btoc = feet below top of casing

mg/L = milligrams per liter

N/A = Not Applicable

NTU = Nephelometric Turbidity Unit

pCi/L = picoCuries per liter

su = standard unit

TDS = total dissolved solids

TOC = top of casing

TABLE III
SUMMARY OF ANALYTICAL RESULTS - NATURE AND EXTENT
NEW MADRID POWER PLANT - POND 003
NEW MADRID, MISSOURI

Location	Upgradient									Downgradient	
	B-123	B-123	B-123	B-126	B-126	B-126	MW-16	MW-16	MW-16	MW-6	MW-6
Measure Point (TOC)	292.7	292.7	292.7	293.63	293.63	293.63	292.853	292.853	292.853	300.27	300.27
Sample Name	B-123	B-123	B-123	B-126	B-126	B-126	MW-16	MW-16	MW-16	MW-6	DUP-P3-02-2025
Sample Date	02/03/2025	05/07/2025	09/04/2025	02/03/2025	05/07/2025	09/04/2025	02/04/2025	05/07/2025	09/03/2025	02/13/2025	02/13/2025
Depth to Water (ft btoc)	23.47	22.09	22.10	27.36	23.70	22.60	30.50	19.34	24.98	35.25	35.25
Temperature (Deg C)	16.88	17.44	17.28	18.42	17.41	18.78	16.67	17.47	20.72	17.05	-
Conductivity, Field (µS/cm)	687	707	641	1	511	570	776	828	718	895	-
Dissolved Oxygen (mg/L)	0.46	5.44	0.00	0.51	0.00	0.00	0.46	0.19	0.00	0.1	-
ORP (mV)	41	-8	-84	306	205	42	-85	-131	-90	263	-
Turbidity, Field (NTU)	10.6	64.7	95.3	14.8	14	5.9	0.0	0.0	0	10.0	-
pH, Field (SU)	6.89	5.44	6.76	6.65	5.64	6.61	6.75	6.63	7.17	6.66	-
Boron, Total (mg/L)	**0.035**	-	**0.030**	**0.038**	-	**0.037**	**0.057**	-	**0.050**	**0.32**	**0.28**
Calcium, Total (mg/L)	**76**	-	**79**	**53**	-	**86**	**110**	-	**110**	**120**	**120**
Chloride (mg/L)	**3.5**	-	**3.8**	**4.3**	-	**5.2**	**7.9**	-	**7.7**	**7.2**	**7.2**
Fluoride (mg/L)	**0.460**	**0.486**	**0.537**	**0.414**	**0.452**	**0.251**	**0.882**	**1.39**	**0.888**	**0.685**	**0.684**
Sulfate (mg/L)	**24**	-	**24**	**33**	-	**15**	**74**	-	**52**	**83**	**86**
pH (lab) (su)	**7.17**	-	**7.08**	**6.63**	-	**7.13**	**6.90**	-	**7.06**	**7.10**	**7.20**
TDS (mg/L)	**340**	-	**380**	**340**	-	**350**	**420**	-	**380**	**480**	**490**
Antimony, Total (mg/L)	< 0.0030	< 0.0030	-	< 0.0030	< 0.0030	-	< 0.0030	< 0.0030	-	-	-
Arsenic, Total (mg/L)	**0.0029**	**0.0011**	**0.0054**	**0.0010**	**0.0013**	**0.0014**	**0.0022**	**0.0025**	**0.0011**	< 0.0010	< 0.0010
Barium, Total (mg/L)	**0.19**	**0.16**	**0.30**	**0.21**	**0.20**	**0.44**	**0.51**	**0.49**	**0.50**	**0.13**	**0.13**
Beryllium, Total (mg/L)	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-	-	-
Cadmium, Total (mg/L)	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-	-	-
Chromium, Total (mg/L)	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cobalt, Total (mg/L)	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	**0.0022**
Iron, Total (mg/L)	**7.4**	-	**7.8**	**0.42**	-	**0.41**	**19**	-	**16**	**0.31**	**0.80**
Lead, Total (mg/L)	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-	-	-
Lithium, Total (mg/L)	**0.025**	**0.024**	**0.025**	< 0.020	**0.012**	< 0.020	< 0.020	**0.020**	< 0.020	**0.014**	**0.014**
Magnesium, Total (mg/L)	**37**	-	**39**	**21**	-	**25**	**24**	-	**23**	**34**	**34**
Manganese, Total (mg/L)	**0.31**	-	**0.76**	**0.071**	-	**0.11**	**1.4**	-	**1.2**	**0.34**	**0.39**
Mercury, Total (mg/L)	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
Molybdenum, Total (mg/L)	**0.0034**	**0.0041**	**0.0042**	< 0.0010	**0.0014**	**0.0017**	< 0.0010	< 0.0010	**0.0013**	**0.031**	**0.030**
Potassium, Total (mg/L)	**3.1**	-	**3.0**	**4.4**	-	**4.0**	**2.4**	-	**2.3**	**1.6**	**1.6**
Selenium, Total (mg/L)	< 0.0010	< 0.0010	< 0.0010	**0.0022**	**0.0017**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Sodium, Total (mg/L)	**7.0**	-	**6.9**	**16**	-	**19**	**16**	-	**17**	**15**	**16**
Thallium, Total (mg/L)	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-	-	-
Aluminum, Dissolved (mg/L)	< 0.010	-	-	**0.20**	-	-	**0.012**	-	-	**0.012**	**0.033**
Aluminum, Total (mg/L)	**0.021**	-	< 0.020	**0.33**	-	**0.16**	**0.028**	-	**0.043**	-	-
Iron, Dissolved (mg/L)	**3.0**	-	**0.042**	**0.58**	-	**0.022**	**19**	-	< 0.010	**0.29**	**1.2**
Manganese, Dissolved (mg/L)	**0.18**	-	**0.71**	**0.067**	-	**0.12**	**1.4**	-	**1.1**	**0.34**	**0.45**
Molybdenum, Dissolved (mg/L)	**0.0036**	-	**0.0040**	< 0.0010	-	**0.0012**	< 0.0010	-	< 0.0010	**0.032**	**0.031**
Phosphorus, Total (mg/L)	**0.81**	-	**0.82**	**0.46**	-	**0.47**	**0.42**	-	**0.39**	< 0.05	< 0.05
Silica, Total (mg/L)	**36**	-	**35**	**18**	-	**19**	**29**	-	**27**	**18**	**18**
Silicon, Total (mg/L)	**17**	-	**16**	**8.5**	-	**8.8**	**14**	-	**13**	**8.5**	**8.6**
Alkalinity, Bicarbonate (as CaCO3), Total (mg/L)	**300**	-	**310**	**140**	-	**180**	**290**	-	**300**	**320**	**340**
Temperature, Lab (Deg C)	**15**	-	**12**	**13**	-	**12**	**14**	-	**12**	**12**	**14**
Ferrous Iron (mg/L)	< 0.20	-	< 0.20	< 0.20	-	< 0.20	< 0.20	-	< 0.20	< 0.20	< 0.20
Nitrate (as N), Total (mg/L)	**0.09**	-	< 0.50	**19**	-	**9.8**	< 0.03	-	< 0.50	**0.17**	**0.16**
Nitrite (as N), Total (mg/L)	< 0.15	-	< 0.50	< 0.15	-	< 0.50	< 0.15	-	< 0.50	< 0.15	< 0.15
Sulfide (mg/L)	< 0.10	-	< 0.25	< 0.10	-	< 0.025	< 0.10	-	< 0.025	**0.032**	< 0.025
Total Organic Carbon (mg/L)	**2.2**	-	**2.8**	**5.2**	-	**4.4**	**2.0**	-	**2.0**	**2.3**	**2.3**
Total Organic Carbon Soluble (mg/L)	**2.9**	-	**2.5**	**5.0**	-	**4.5**	**1.9**	-	**2.1**	**2.5**	**2.8**
Radium-226 & 228, Combined (pCi/L)	**1.95 ± 0.943 (0.499)**	**1.01 ± 0.620 (0.889)**	< 1.47 ± 0.58 (0.675)	-	**0.849 ± 0.579 (0.818)**	< 1.41 ± 0.539 (0.626)	**2.19 ± 1.204 (0.848)**	**1.32 ± 0.992 (1.36)**	< 1.85 ± 0.683 (0.699)	**0.724 ± 0.716 (0.515)**	**0.857 ± 0.634 (0.522)**

Notes:

Bold value: *Detection above laboratory reporting limit or minimum detectable concentration (MDC). Radiological results are presented as activity plus or minus uncertainty with MDC.*

µS/cm = micro Siemens per centimeter
Deg C = degrees Celsius
ft btoc = feet below top of casing
mg/L = milligrams per liter
N/A = Not Applicable
NTU = Nephelometric Turbidity Unit
pCi/L = picoCuries per liter
su = standard unit
TDS = total dissolved solids
TOC = top of casing

TABLE III
SUMMARY OF ANALYTICAL RESULTS - NATURE AND EXTENT
NEW MADRID POWER PLANT - POND 003
NEW MADRID, MISSOURI

Location	Downgradient										
	MW-6	MW-6	MW-6	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7D	MW-7D
Measure Point (TOC)	300.27	300.27	300.27	301.501	301.501	301.501	301.501	301.501	301.501	302.07	302.07
Sample Name	MW-6	MW-6	DUP-P3-09-2025	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7	MW-7D	MW-7D
Sample Date	05/08/2025	09/09/2025	09/09/2025	02/13/2025	04/01/2025	05/08/2025	09/09/2025	11/24/2025	12/12/2025	02/13/2025	09/09/2025
Depth to Water (ft btoc)	24.15	34.90	34.90	38.69	30.47	24.95	33.82	-	-	38.00	24.20
Temperature (Deg C)	18.08	18.99	-	16.38	17.34	17.54	18.86	-	-	9.30	19.79
Conductivity, Field (µS/cm)	813	845	-	637	701	753	1070	-	-	672	877
Dissolved Oxygen (mg/L)	0.06	0.00	-	0.00	0.00	4.24	0.00	-	-	0.00	0.00
ORP (mV)	71	287	-	134	182	73	85	-	-	-104	-125
Turbidity, Field (NTU)	0.0	0.0	-	10.2	7.6	0.0	0.0	-	-	0.2	0.0
pH, Field (SU)	5.89	6.64	-	6.43	6.61	5.49	6.21	-	-	7.10	6.67
Boron, Total (mg/L)	-	**0.34**	**0.37**	**4.2**	-	-	**1.7**	-	-	**3.3**	**4.5**
Calcium, Total (mg/L)	-	**120**	**120**	**96**	-	-	**160**	-	-	**110**	**130**
Chloride (mg/L)	-	< 1.0	< 1.0	**18**	-	-	**2.7**	-	-	**12**	**9.7**
Fluoride (mg/L)	**0.619**	**0.375**	**0.368**	**0.354**	-	**0.355**	**0.300**	-	-	**0.561**	**0.586**
Sulfate (mg/L)	-	**31**	**32**	**110**	-	-	**99**	-	-	**65**	**91**
pH (lab) (su)	-	**6.86**	**7.51**	**6.89**	-	-	**6.63**	-	-	**7.27**	**7.29**
TDS (mg/L)	-	**450**	**390**	**440**	-	-	**610**	-	-	**440**	**460**
Antimony, Total (mg/L)	< 0.0030	-	-	-	-	< 0.0030	-	-	-	-	-
Arsenic, Total (mg/L)	< 0.0010	< 0.0010	< 0.0010	**0.0039**	-	**0.0024**	**0.0030**	-	-	**0.0042**	**0.0046**
Barium, Total (mg/L)	**0.14**	**0.16**	**0.15**	**0.087**	-	**0.099**	**0.13**	-	-	**0.10**	**0.12**
Beryllium, Total (mg/L)	< 0.0010	-	-	-	-	< 0.0010	-	-	-	-	-
Cadmium, Total (mg/L)	< 0.0010	< 0.0010	< 0.0010	-	-	< 0.0010	< 0.0010	-	-	-	-
Chromium, Total (mg/L)	< 0.0040	< 0.0040	< 0.0040	< 0.0040	-	< 0.0040	< 0.0040	-	-	< 0.0040	< 0.0040
Cobalt, Total (mg/L)	< 0.0020	< 0.0020	< 0.0020	-	**0.0060**	**0.0070**	**0.010**	**0.0072**	**0.0071**	< 0.0020	< 0.0020
Iron, Total (mg/L)	-	**0.063**	**0.030**	**0.55**	-	-	**0.36**	-	-	**6.6**	**8.1**
Lead, Total (mg/L)	< 0.0010	-	-	-	-	< 0.0010	-	-	-	-	-
Lithium, Total (mg/L)	**0.015**	< 0.020	< 0.020	**0.015**	-	**0.018**	**0.022**	-	-	**0.021**	**0.020**
Magnesium, Total (mg/L)	-	**36**	**34**	**11**	-	-	**19**	-	-	**19**	**20**
Manganese, Total (mg/L)	-	**0.13**	**0.11**	**0.016**	-	-	**0.013**	-	-	**0.66**	**0.79**
Mercury, Total (mg/L)	< 0.00020	-	-	< 0.00020	-	< 0.00020	-	-	-	< 0.00020	-
Molybdenum, Total (mg/L)	**0.043**	**0.0064**	**0.0070**	**1.0**	-	**1.3**	**1.3**	-	-	**0.30**	**0.47**
Potassium, Total (mg/L)	-	**1.8**	**1.6**	**14**	-	-	**19**	-	-	**11**	**14**
Selenium, Total (mg/L)	< 0.0010	< 0.0010	< 0.0010	< 0.0010	-	**0.039**	**0.037**	-	-	< 0.0010	< 0.0010
Sodium, Total (mg/L)	-	**14**	**10**	**41**	-	-	**35**	-	-	**21**	**28**
Thallium, Total (mg/L)	< 0.0010	-	-	-	-	< 0.0010	-	-	-	-	-
Aluminum, Dissolved (mg/L)	-	-	-	**0.012**	-	-	-	-	-	**0.019**	-
Aluminum, Total (mg/L)	-	**0.035**	**0.029**	-	-	-	**0.022**	-	-	-	**0.022**
Iron, Dissolved (mg/L)	-	< 0.010	**0.013**	**0.63**	-	-	**0.011**	-	-	**7.3**	**0.011**
Manganese, Dissolved (mg/L)	-	**0.088**	**0.098**	**0.017**	-	-	**0.013**	-	-	**0.69**	**0.72**
Molybdenum, Dissolved (mg/L)	-	**0.0064**	**0.0073**	**1.1**	-	-	**1.4**	-	-	**0.33**	**0.42**
Phosphorus, Total (mg/L)	-	< 0.05	< 0.05	**0.22**	-	-	**0.23**	-	-	**0.3**	**0.34**
Silica, Total (mg/L)	-	**23**	**23**	**21**	-	-	**22**	-	-	**26**	**27**
Silicon, Total (mg/L)	-	**11**	**11**	**9.8**	-	-	**10**	-	-	**12**	**13**
Alkalinity, Bicarbonate (as CaCO3), Total (mg/L)	-	**390**	**410**	**250**	-	-	**450**	-	-	**300**	**340**
Temperature, Lab (Deg C)	-	**12**	**16**	**14**	-	-	**12**	-	-	**13**	**8.0**
Ferrous Iron (mg/L)	-	< 0.20	< 0.20	< 0.20	-	-	< 0.20	-	-	< 0.20	< 0.20
Nitrate (as N), Total (mg/L)	-	**0.76**	**0.66**	**0.29**	-	-	**1.2**	-	-	< 0.03	< 0.50
Nitrite (as N), Total (mg/L)	-	< 0.50	< 0.50	< 0.15	-	-	< 0.50	-	-	< 0.15	< 0.50
Sulfide (mg/L)	-	< 0.025	< 0.025	< 0.025	-	-	< 0.025	-	-	-	< 0.025
Total Organic Carbon (mg/L)	-	**2.8**	**2.7**	**3.1**	-	-	**3.6**	-	-	**1.8**	**2.5**
Total Organic Carbon Soluble (mg/L)	-	**3.3**	**2.8**	**3.3**	-	-	**4.1**	-	-	**1.9**	**2.2**
Radium-226 & 228, Combined (pCi/L)	**2.37 ± 0.798 (0.894)**	< 1.3 ± 0.543 (0.705)	< 1.13 ± 0.613 (0.833)	**0.971 ± 0.566 (0.443)**	-	**1.45 ± 0.613 (0.715)**	< 2.18 ± 0.679 (0.801)	-	-	< 0.737 ± 0.770 (0.633)	< 0.654 ± 1.04421 (1.67)

Notes:

Bold value: *Detection above laboratory reporting limit or minimum detectable concentration (MDC). Radiological results are presented as activity plus or minus uncertainty with MDC.*

µS/cm = micro Siemens per centimeter
Deg C = degrees Celsius
ft btoc = feet below top of casing
mg/L = milligrams per liter
N/A = Not Applicable
NTU = Nephelometric Turbidity Unit
pCi/L = picoCuries per liter
su = standard unit
TDS = total dissolved solids
TOC = top of casing

TABLE III
SUMMARY OF ANALYTICAL RESULTS - NATURE AND EXTENT
NEW MADRID POWER PLANT - POND 003
NEW MADRID, MISSOURI

Location	Downgradient										
	MW-8	MW-8	MW-8	MW-9	MW-9	MW-9	MW-19S	MW-19S	MW-20S	MW-20S	MW-20D
Measure Point (TOC)	310.628	310.628	310.628	310.237	310.237	310.237	293.87	293.87	293.56	293.56	293.45
Sample Name	MW-8	MW-8	MW-8	MW-9	MW-9	MW-9	MW-19S	MW-19S	MW-20S	MW-20S	MW-20D
Sample Date	02/07/2025	05/07/2025	09/08/2025	02/07/2025	05/07/2025	09/08/2025	02/10/2025	09/30/2025	02/14/2025	09/30/2025	02/14/2025
Depth to Water (ft btoc)	47.72	33.95	42.75	47.27	33.11	44.30	24.80	34.54	22.14	33.70	22.06
Temperature (Deg C)	16.94	17.50	20.31	16.93	17.61	18.68	17.36	17.36	18.41	17.99	18.15
Conductivity, Field (µS/cm)	865	837	995	808	917	914	1070	1050	1020	1090	742
Dissolved Oxygen (mg/L)	0.07	0.00	3.02	0.01	0.00	0.58	0.53	6.48	0.22	2.07	2.29
ORP (mV)	-82	-118	-6	-50	-110	-109	207	35	-121	-31	-133
Turbidity, Field (NTU)	9.7	8.0	3.8	0.0	0.0	0.0	2.5	1.0	0	0.5	9.6
pH, Field (SU)	6.81	6.78	6.72	7.12	6.95	6.93	6.83	7.67	6.70	7.74	7.03
Boron, Total (mg/L)	**4.3**	-	**6.5**	**5.3**	-	**4.0**	**1.1**	**1.3**	**1.9**	**1.8**	**1.0**
Calcium, Total (mg/L)	**140**	-	**140**	**120**	-	**110**	**140**	**140**	**130**	**140**	**80**
Chloride (mg/L)	**9.1**	-	**8.5**	**17**	-	**15**	**18**	**19**	**19**	**21**	**20**
Fluoride (mg/L)	**0.272**	< 0.250	< 0.250	**0.738**	**0.552**	**0.579**	**0.370**	**0.451**	**0.559**	**0.604**	**0.779**
Sulfate (mg/L)	**64**	-	**80**	**160**	-	**150**	**230**	**260**	**280**	**300**	**150**
pH (lab) (su)	**7.28**	-	**7.09**	**7.50**	-	**7.26**	**7.05**	**7.22**	**7.43**	**7.12**	**7.40**
TDS (mg/L)	**520**	-	**550**	**560**	-	**500**	**660**	**600**	**630**	**680**	**420**
Antimony, Total (mg/L)	-	< 0.0030	-	-	< 0.0030	-	-	-	-	-	< 0.0030
Arsenic, Total (mg/L)	**0.0065**	**0.0071**	**0.0047**	**0.0018**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.0030**	**0.0029**	**0.0016**
Barium, Total (mg/L)	**0.14**	**0.13**	**0.16**	**0.081**	**0.086**	**0.086**	**0.11**	**0.13**	**0.16**	**0.18**	**0.086**
Beryllium, Total (mg/L)	-	< 0.0010	-	-	< 0.0010	-	-	-	-	-	< 0.0010
Cadmium, Total (mg/L)	-	< 0.0010	-	-	< 0.0010	-	-	-	-	-	< 0.0010
Chromium, Total (mg/L)	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cobalt, Total (mg/L)	**0.0041**	**0.0026**	**0.0037**	**0.0023**	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Iron, Total (mg/L)	**8.8**	-	**4.9**	**0.33**	-	**0.088**	**0.23**	**0.67**	**4.2**	**4.1**	**2.5**
Lead, Total (mg/L)	-	< 0.0010	-	-	< 0.0010	-	-	-	-	-	< 0.0010
Lithium, Total (mg/L)	< 0.020	**0.014**	< 0.020	< 0.020	**0.020**	**0.021**	< 0.020	**0.018**	**0.017**	**0.016**	**0.011**
Magnesium, Total (mg/L)	**33**	-	**30**	**26**	-	**25**	**29**	**29**	**28**	**32**	**23**
Manganese, Total (mg/L)	**1.7**	-	**1.9**	**0.18**	-	**0.013**	**0.19**	**0.90**	**0.33**	**0.38**	**0.27**
Mercury, Total (mg/L)	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	-	< 0.00020	-	< 0.00020
Molybdenum, Total (mg/L)	**0.31**	**0.34**	**0.43**	**0.43**	**0.41**	**0.35**	**0.042**	**0.049**	**0.31**	**0.25**	**0.18**
Potassium, Total (mg/L)	**5.9**	-	**6.1**	**12**	-	**11**	**6.2**	**6.4**	**8.4**	**9.1**	**5.5**
Selenium, Total (mg/L)	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.0016**	< 0.0010	**0.0030**	< 0.0010	< 0.0010	< 0.0010
Sodium, Total (mg/L)	**17**	-	**26**	**40**	-	**34**	**32**	**32**	**33**	**36**	**26**
Thallium, Total (mg/L)	-	< 0.0010	-	-	< 0.0010	-	-	-	-	-	< 0.0010
Aluminum, Dissolved (mg/L)	-	-	-	-	-	-	-	-	**0.018**	-	**0.048**
Aluminum, Total (mg/L)	< 0.020	-	**0.029**	< 0.020	-	**0.060**	**0.030**	**0.023**	-	**0.028**	**0.062**
Iron, Dissolved (mg/L)	**8.8**	-	< 0.010	**0.36**	-	< 0.010	**0.18**	**0.016**	**4.7**	< 0.010	**2.6**
Manganese, Dissolved (mg/L)	**1.7**	-	**1.8**	**0.18**	-	**0.0092**	**0.18**	**0.86**	**0.35**	**0.38**	**0.28**
Molybdenum, Dissolved (mg/L)	**0.31**	-	**0.43**	**0.45**	-	**0.34**	**0.050**	**0.050**	**0.34**	**0.26**	**0.19**
Phosphorus, Total (mg/L)	**0.47**	-	**0.33**	< 0.05	-	**0.054**	< 0.05	< 0.05	**0.13**	**0.14**	**0.16**
Silica, Total (mg/L)	**25**	-	**25**	**20**	-	**22**	**16**	**17**	**26**	**25**	**21**
Silicon, Total (mg/L)	**12**	-	**11**	**9.1**	-	**10**	**7.6**	**8.1**	**12**	**12**	**9.7**
Alkalinity, Bicarbonate (as CaCO3), Total (mg/L)	**400**	-	**440**	**300**	-	**280**	**300**	**290**	**190**	**320**	**340**
Temperature, Lab (Deg C)	**12**	-	**7.5**	**11**	-	**7.8**	**8.9**	**12**	**11**	**12**	**13**
Ferrous Iron (mg/L)	< 0.20	-	< 0.20	< 0.20	-	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Nitrate (as N), Total (mg/L)	**0.05**	-	**0.32**	< 0.03	-	**0.76**	**0.05**	**0.07**	< 0.03	< 0.03	**0.27**
Nitrite (as N), Total (mg/L)	< 0.15	-	< 0.15	< 0.15	-	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15
Sulfide (mg/L)	< 0.10	-	< 0.025	**0.043**	-	**0.14**	< 0.10	< 0.025	-	< 0.025	-
Total Organic Carbon (mg/L)	**2.1**	-	**1.9**	**1.5**	-	**1.6**	**1.4**	**1.4**	**1.3**	**1.5**	**0.87**
Total Organic Carbon Soluble (mg/L)	**2.1**	-	**2.5**	**1.5**	-	**1.5**	**1.3**	**1.4**	**0.99**	**1.5**	**1.0**
Radium-226 & 228, Combined (pCi/L)	**1.61 ± 0.982 (0.964)**	**0.851 ± 0.531 (0.720)**	< 1.65 ± 0.486 (0.710)	**0.809 ± 0.863 (0.859)**	< 0.233 ± 0.462 (0.739)	**2.87 ± 0.701 (0.703)**	**0.867 ± 0.736 (0.660)**	**1.31 ± 0.755 (0.382)**	**0.385 ± 0.669 (0.591)**	**0.495 ± 0.525 (0.279)**	< 0.555 ± 0.496 (0.408)

Notes:

Bold value: *Detection above laboratory reporting limit or minimum detectable concentration (MDC). Radiological results are presented as activity plus or minus uncertainty with MDC.*

µS/cm = micro Siemens per centimeter
Deg C = degrees Celsius
ft btoc = feet below top of casing
mg/L = milligrams per liter
N/A = Not Applicable
NTU = Nephelometric Turbidity Unit
pCi/L = picoCuries per liter
su = standard unit
TDS = total dissolved solids
TOC = top of casing

TABLE III
SUMMARY OF ANALYTICAL RESULTS - NATURE AND EXTENT
NEW MADRID POWER PLANT - POND 003
NEW MADRID, MISSOURI

Location	Downgradient										
	MW-20D	MW-21S	MW-21S	MW-21D	MW-21D	MW-22S	MW-22S	MW-22D	MW-22D	MW-23S	MW-23S
Measure Point (TOC)	293.45	289.9	289.9	289.95	289.95	293.66	293.66	293.54	293.54	292.32	292.32
Sample Name	MW-20D	MW-21S	MW-21S	MW-21D	MW-21D	MW-22S	MW-22S	MW-22D	MW-22D	MW-23S	NE-DUP1-02-2025
Sample Date	09/15/2025	02/14/2025	09/30/2025	02/14/2025	09/15/2025	02/14/2025	09/30/2025	02/14/2025	09/15/2025	02/10/2025	02/10/2025
Depth to Water (ft btoc)	33.70	17.75	30.42	17.62	30.45	21.89	34.19	19.83	34.17	23.79	23.79
Temperature (Deg C)	18.48	16.37	15.47	16.35	18.18	15.84	19.06	15.97	28.74	17.28	-
Conductivity, Field (µS/cm)	1140	1000	1050	844	823	1050	1170	993	745	950	-
Dissolved Oxygen (mg/L)	0.91	0.00	0.92	2.08	0.00	0.68	0.9	0.00	0.00	5.69	-
ORP (mV)	-30	38	201	-144	-157	170	23	-137	-173	245	-
Turbidity, Field (NTU)	0.0	6.1	1.7	9.8	54	9.3	8.1	6.2	0.0	4.6	-
pH, Field (SU)	7.04	6.61	7.15	6.99	6.99	6.59	7.50	7.05	7.12	6.67	-
Boron, Total (mg/L)	**7.4**	**4.0**	**3.2**	**2.9**	**2.7**	**6.8**	**4.0**	**5.1**	**1.2**	**1.6**	**1.6**
Calcium, Total (mg/L)	**140**	**140**	**160**	**110**	**110**	**120**	**160**	**130**	**72**	**120**	**120**
Chloride (mg/L)	**15**	**16**	**17**	**17**	**17**	**17**	**23**	**16**	**19**	**18**	**18**
Fluoride (mg/L)	**0.551**	**0.783**	**0.778**	**0.470**	**0.436**	**0.323**	**0.265**	**0.632**	**0.670**	**0.310**	**0.298**
Sulfate (mg/L)	**210**	**100**	**95**	**100**	**110**	**170**	**150**	**140**	**130**	**93**	**91**
pH (lab) (su)	**7.43**	**7.21**	**6.98**	**7.56**	**7.42**	**7.24**	**6.91**	**7.55**	**7.46**	**6.86**	**6.93**
TDS (mg/L)	**640**	**520**	**620**	**460**	**430**	**540**	**700**	**520**	**360**	**530**	**600**
Antimony, Total (mg/L)	-	-	-	-	-	-	-	-	-	-	-
Arsenic, Total (mg/L)	**0.0060**	**0.0020**	< 0.0010	**0.0021**	**0.0018**	< 0.0010	< 0.0010	**0.0043**	**0.0017**	< 0.0010	< 0.0010
Barium, Total (mg/L)	**0.12**	**0.12**	**0.14**	**0.14**	**0.14**	**0.13**	**0.18**	**0.11**	**0.071**	**0.12**	**0.12**
Beryllium, Total (mg/L)	-	-	-	-	-	-	-	-	-	-	-
Cadmium, Total (mg/L)	-	-	-	-	-	-	-	-	-	-	-
Chromium, Total (mg/L)	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cobalt, Total (mg/L)	< 0.0020	< 0.0020	**0.0029**	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Iron, Total (mg/L)	-	**0.89**	**0.12**	**4.0**	-	**0.79**	**1.7**	**2.7**	-	**0.017**	< 0.010
Lead, Total (mg/L)	-	-	-	-	-	-	-	-	-	-	-
Lithium, Total (mg/L)	**0.021**	**0.020**	**0.016**	**0.024**	**0.023**	**0.018**	**0.017**	**0.021**	**0.010**	**0.023**	< 0.020
Magnesium, Total (mg/L)	-	**19**	**22**	**13**	-	**20**	**29**	**24**	-	**28**	**28**
Manganese, Total (mg/L)	-	**0.18**	**0.18**	**0.26**	-	**0.34**	**1.5**	**1.2**	-	< 0.0010	< 0.0010
Mercury, Total (mg/L)	-	< 0.00020	-	< 0.00020	-	< 0.00020	-	< 0.00020	-	< 0.00020	< 0.00020
Molybdenum, Total (mg/L)	**0.64**	**0.80**	**0.46**	**0.31**	**0.30**	**0.19**	**0.10**	**0.57**	**0.20**	**0.016**	**0.016**
Potassium, Total (mg/L)	-	**9.8**	**10**	**10**	-	**5.0**	**5.5**	**6.7**	-	**4.6**	**4.6**
Selenium, Total (mg/L)	< 0.0010	< 0.0010	**0.0055**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.0057**	**0.0057**
Sodium, Total (mg/L)	-	**27**	**21**	**31**	-	**58**	**47**	**31**	-	**34**	**35**
Thallium, Total (mg/L)	-	-	-	-	-	-	-	-	-	-	-
Aluminum, Dissolved (mg/L)	-	**0.16**	-	**0.034**	-	< 0.010	-	**0.027**	-	-	-
Aluminum, Total (mg/L)	-	-	**0.087**	-	-	-	< 0.020	-	-	**0.073**	< 0.020
Iron, Dissolved (mg/L)	-	**3.5**	< 0.010	**4.5**	-	**0.91**	< 0.010	**2.8**	-	< 0.010	< 0.010
Manganese, Dissolved (mg/L)	-	**0.19**	**0.19**	**0.26**	-	**0.35**	**1.5**	**1.3**	-	< 0.0010	< 0.0010
Molybdenum, Dissolved (mg/L)	-	**0.81**	**0.48**	**0.33**	-	**0.20**	**0.10**	**0.60**	-	**0.017**	**0.017**
Phosphorus, Total (mg/L)	-	**0.1**	< 0.05	**0.51**	-	< 0.05	< 0.05	**0.41**	-	< 0.05	< 0.05
Silica, Total (mg/L)	-	**21**	**21**	**25**	-	**17**	**19**	**22**	-	**22**	**21**
Silicon, Total (mg/L)	-	**9.8**	**10**	**12**	-	**8.1**	**9.1**	**10**	-	**10**	**9.8**
Alkalinity, Bicarbonate (as CaCO3), Total (mg/L)	-	**340**	**420**	**250**	-	**290**	**420**	**300**	-	**360**	**360**
Temperature, Lab (Deg C)	**16**	**12**	**12**	**12**	**16**	**12**	**12**	**12**	**17**	**9.8**	**8.9**
Ferrous Iron (mg/L)	-	< 0.20	< 0.20	< 0.20	-	< 0.20	< 0.20	< 0.20	-	< 0.20	< 0.20
Nitrate (as N), Total (mg/L)	-	< 0.03	**0.96**	< 0.03	-	**0.04**	**0.15**	< 0.03	-	**0.09**	**0.84**
Nitrite (as N), Total (mg/L)	-	< 0.15	< 0.15	< 0.15	-	< 0.15	< 0.15	< 0.15	-	< 0.15	< 0.15
Sulfide (mg/L)	-	-	< 0.025	-	-	-	< 0.025	-	-	< 0.10	< 0.10
Total Organic Carbon (mg/L)	-	**1.4**	**2.3**	**1.3**	-	**1.9**	**2.6**	**1.7**	-	**2.0**	**1.9**
Total Organic Carbon Soluble (mg/L)	-	**1.9**	**2.5**	**1.3**	-	**2.0**	**2.8**	**2.5**	-	**1.8**	**1.9**
Radium-226 & 228, Combined (pCi/L)	< 1.70 ± 0.643952 (0.802)	< 0.816 ± 0.575 (0.363)	**1.18 ± 0.540 (0.261)**	< 1.14 ± 0.739 (0.380)	< 1.30 ± 0.5777 (0.723)	< 0.630 ± 0.649 (0.569)	**1.17 ± 0.577 (0.264)**	< 0.421 ± 0.732 (0.616)	< 1.73 ± 0.689035 (0.819)	**1.18 ± 0.875 (0.667)**	**0.835 ± 0.894 (0.920)**

Notes:

Bold value: *Detection above laboratory reporting limit or minimum detectable concentration (MDC). Radiological results are presented as activity plus or minus uncertainty with MDC.*

µS/cm = micro Siemens per centimeter
Deg C = degrees Celsius
ft btoc = feet below top of casing
mg/L = milligrams per liter
N/A = Not Applicable
NTU = Nephelometric Turbidity Unit
pCi/L = picoCuries per liter
su = standard unit
TDS = total dissolved solids
TOC = top of casing

TABLE III
SUMMARY OF ANALYTICAL RESULTS - NATURE AND EXTENT
NEW MADRID POWER PLANT - POND 003
NEW MADRID, MISSOURI

Location	Downgradient											
	MW-24S	MW-24S	MW-24D	MW-24D	MW-24D	MW-25S	MW-25S	MW-25D	MW-25D	MW-26S	MW-26S
Measure Point (TOC)	300.66	300.66	300.67	300.67	300.67	299.35	299.35	299.25	299.25	298.96	298.96
Sample Name	MW-24S	MW-24S	MW-24D	MW-24D	NE-DUP1-09-2025	MW-25S	MW-25S	MW-25D	MW-25D	MW-26S	MW-26S
Sample Date	02/10/2025	09/11/2025	02/10/2025	09/11/2025	09/11/2025	02/10/2025	09/11/2025	02/10/2025	09/11/2025	02/13/2025	09/09/2025
Depth to Water (ft btoc)	36.90	31.45	35.50	29.90	29.90	35.80	30.11	35.50	29.90	34.80	32.55
Temperature (Deg C)	15.70	17.51	15.70	17.46	-	15.98	27.35	15.65	17.73	16.97	18.60
Conductivity, Field (µS/cm)	715	746	549	675	-	584	595	535	674	932	1030
Dissolved Oxygen (mg/L)	0.00	1.99	0.43	0.00	-	0.00	0.00	0.00	0.00	0.00	1.27
ORP (mV)	-73	-125	-97	-152	-	-77	-98	-13	-147	39	35
Turbidity, Field (NTU)	1.2	9.8	1.7	0.0	-	6.7	10	0.07	0.0	0	8.3
pH, Field (SU)	6.82	6.66	6.81	6.62	-	6.52	6.18	6.64	6.55	6.46	6.32
Boron, Total (mg/L)	**0.055**	**0.061**	**0.033**	**0.031**	**0.030**	**0.029**	**0.034**	**0.032**	**0.047**	**4.6**	**2.9**
Calcium, Total (mg/L)	**94**	**89**	**65**	**74**	**74**	**63**	**56**	**56**	**63**	**110**	**150**
Chloride (mg/L)	**7.6**	**9.6**	**12**	**14**	**14**	**15**	**18**	**12**	**13**	**27**	**3.1**
Fluoride (mg/L)	< 0.250	< 0.250	< 0.250	< 0.250	< 0.250	**0.273**	**0.280**	**0.348**	**0.310**	**0.902**	**0.591**
Sulfate (mg/L)	**69**	**49**	**38**	**48**	**48**	**59**	**67**	**41**	**54**	**86**	**130**
pH (lab) (su)	**7.04**	**7.10**	**7.06**	**7.07**	**6.98**	**6.81**	**6.78**	**6.87**	**6.80**	**7.06**	**7.10**
TDS (mg/L)	**410**	**380**	**290**	**330**	**360**	**320**	**320**	**290**	**330**	**470**	**560**
Antimony, Total (mg/L)	-	-	-	-	-	-	-	-	-	-	-
Arsenic, Total (mg/L)	**0.0031**	**0.0042**	**0.0031**	**0.0034**	**0.0033**	**0.0051**	**0.0050**	**0.0033**	**0.0036**	**0.0012**	**0.0090**
Barium, Total (mg/L)	**0.18**	**0.18**	**0.13**	**0.14**	**0.13**	**0.30**	**0.27**	**0.12**	**0.13**	**0.12**	**0.16**
Beryllium, Total (mg/L)	-	-	-	-	-	-	-	-	-	-	-
Cadmium, Total (mg/L)	-	-	-	-	-	-	-	-	-	-	-
Chromium, Total (mg/L)	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cobalt, Total (mg/L)	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	**0.0032**	**0.0089**
Iron, Total (mg/L)	**4.1**	**3.6**	**9.0**	**8.6**	**8.5**	**16**	**14**	**16**	**16**	**0.31**	**2.9**
Lead, Total (mg/L)	-	-	-	-	-	-	-	-	-	-	-
Lithium, Total (mg/L)	< 0.020	**0.015**	< 0.020	**0.010**	< 0.010	< 0.020	< 0.010	< 0.020	< 0.010	**0.021**	**0.023**
Magnesium, Total (mg/L)	**27**	**27**	**22**	**25**	**25**	**28**	**25**	**22**	**27**	**19**	**35**
Manganese, Total (mg/L)	**0.60**	**0.59**	**0.78**	**0.81**	**0.80**	**0.80**	**0.61**	**1.1**	**1.1**	**0.045**	**0.027**
Mercury, Total (mg/L)	< 0.00020	-	< 0.00020	-	-	< 0.00020	-	< 0.00020	-	< 0.00020	-
Molybdenum, Total (mg/L)	< 0.0010	**0.0011**	**0.0040**	**0.0040**	**0.0038**	**0.0078**	**0.020**	**0.0037**	**0.0087**	**1.0**	**0.43**
Potassium, Total (mg/L)	**2.4**	**2.4**	**1.7**	**1.8**	**1.8**	**2.0**	**1.9**	**1.8**	**1.9**	**11**	**5.7**
Selenium, Total (mg/L)	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.0054**
Sodium, Total (mg/L)	**6.1**	**6.1**	**8.3**	**8.3**	**8.6**	**14**	**13**	**7.9**	**8.3**	**42**	**26**
Thallium, Total (mg/L)	-	-	-	-	-	-	-	-	-	-	-
Aluminum, Dissolved (mg/L)	-	-	-	-	-	-	-	-	-	**0.011**	-
Aluminum, Total (mg/L)	**0.027**	< 0.020	**0.066**	< 0.020	< 0.020	< 0.020	**0.032**	< 0.020	**0.022**	-	**0.089**
Iron, Dissolved (mg/L)	**4.1**	< 0.010	**8.9**	**0.028**	**0.013**	**16**	**0.28**	**17**	**0.014**	**0.31**	**0.026**
Manganese, Dissolved (mg/L)	**0.60**	**0.56**	**0.77**	**0.79**	**0.78**	**0.78**	**0.59**	**1.0**	**1.1**	**0.047**	**0.022**
Molybdenum, Dissolved (mg/L)	< 0.0010	< 0.0010	**0.0041**	**0.0039**	**0.0039**	**0.0086**	**0.018**	**0.0040**	**0.0085**	**1.1**	**0.41**
Phosphorus, Total (mg/L)	**0.098**	**0.12**	**0.26**	**0.28**	**0.28**	**0.28**	**0.23**	**0.34**	**0.34**	< 0.05	**0.46**
Silica, Total (mg/L)	**25**	**26**	**31**	**31**	**31**	**32**	**34**	**32**	**35**	**19**	**23**
Silicon, Total (mg/L)	**12**	**12**	**15**	**15**	**15**	**15**	**16**	**15**	**16**	**8.9**	**11**
Alkalinity, Bicarbonate (as CaCO3), Total (mg/L)	**260**	**260**	**200**	**220**	**210**	**220**	**220**	**200**	**200**	**300**	**400**
Temperature, Lab (Deg C)	**10**	**8.1**	**9.6**	**8.2**	**11**	**8.7**	**9.2**	**9.6**	**11**	**14**	**8.2**
Ferrous Iron (mg/L)	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	**2.2**	**1.4**	**0.27**	< 0.20	< 0.20	< 0.20
Nitrate (as N), Total (mg/L)	**0.12**	**0.14**	< 0.03	**0.13**	< 0.03	< 0.03	< 0.03	**0.23**	**0.07**	< 0.03	< 0.50
Nitrite (as N), Total (mg/L)	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.15	< 0.30	< 0.50
Sulfide (mg/L)	< 0.10	< 0.025	< 0.10	< 0.025	< 0.025	< 0.10	< 0.025	< 0.10	< 0.025	< 0.10	< 0.025
Total Organic Carbon (mg/L)	**1.7**	**3.1**	**1.5**	**1.6**	**1.4**	**2.1**	**2.0**	**1.5**	**1.5**	**3.3**	**4.1**
Total Organic Carbon Soluble (mg/L)	**1.8**	**1.8**	**1.5**	**1.4**	**1.5**	**2.0**	**1.9**	**1.4**	**1.5**	**3.3**	**4.2**
Radium-226 & 228, Combined (pCi/L)	**0.947 ± 0.632 (0.437)**	**0.765 ± 0.685414 (1.03)**	**1.23 ± 0.674 (0.508)**	**6.22 ± 1.50588 (0.804)**	**1.15 ± 0.5886 (0.789)**	**1.15 ± 0.572 (0.463)**	**0.715 ± 0.676404 (0.979)**	**0.749 ± 0.527 (0.420)**	**2.74 ± 1.01199 (0.830)**	**0.636 ± 0.742 (0.526)**	**1.43 ± 0.654164 (0.786)**

Notes:

Bold value: *Detection above laboratory reporting limit or minimum detectable concentration (MDC). Radiological results are presented as activity plus or minus uncertainty with MDC.*

µS/cm = micro Siemens per centimeter
Deg C = degrees Celsius
ft btoc = feet below top of casing
mg/L = milligrams per liter
N/A = Not Applicable
NTU = Nephelometric Turbidity Unit
pCi/L = picoCuries per liter
su = standard unit
TDS = total dissolved solids
TOC = top of casing

TABLE III
SUMMARY OF ANALYTICAL RESULTS - NATURE AND EXTENT
NEW MADRID POWER PLANT - POND 003
NEW MADRID, MISSOURI

Location	Downgradient											
	MW-26D	MW-26D	P-1	P-1	P-1	P-2	P-2	P-2	P-2	P-3	P-3	P-3
Measure Point (TOC)	298.92	298.92	313.25	313.25	313.25	309.838	309.838	309.838	309.838	310.724	310.724	310.724
Sample Name	MW-26D	MW-26D	P-1	P-1	P-1	P-2	P-2	DUP-POND3-MAY25	P-2	P-3	P-3	P-3
Sample Date	02/13/2025	09/09/2025	02/07/2025	05/07/2025	09/08/2025	02/07/2025	05/07/2025	05/07/2025	09/29/2025	02/07/2025	05/07/2025	09/29/2025
Depth to Water (ft btoc)	34.75	32.52	47.63	37.26	52.30	44.17	33.65	33.65	54.69	45.42	34.25	49.30
Temperature (Deg C)	32.52	18.26	18	18.94	20.89	19.01	19.77	-	27.56	17.00	18.81	22.06
Conductivity, Field (µS/cm)	973	1030	893	1100	1080	985	1100	-	1180	918	1030	1090
Dissolved Oxygen (mg/L)	0.05	0.00	5.69	5.54	0.00	8.50	8.43	-	3.56	3.46	5.43	2.27
ORP (mV)	-97	-136	244	-10	-18	279	175	-	207	288	175	195
Turbidity, Field (NTU)	4.2	0.0	1.5	0.0	0.0	0.0	0.0	-	21.5	1.7	0.0	3.8
pH, Field (SU)	6.67	6.67	6.93	6.74	6.94	6.97	6.88	-	7.41	6.80	7.27	7.42
Boron, Total (mg/L)	**7.8**	**9.9**	**1.5**	-	**1.6**	**2.2**	-	-	**2.5**	**7.4**	-	**7.4**
Calcium, Total (mg/L)	**120**	**120**	**140**	-	**170**	**140**	-	-	**160**	**160**	-	**170**
Chloride (mg/L)	**15**	**12**	**21**	-	**14**	**19**	-	-	**11**	**15**	-	**14**
Fluoride (mg/L)	**0.558**	**0.552**	**0.508**	**0.331**	**0.294**	**0.56**	**0.495**	**0.490**	**0.416**	**0.616**	**0.673**	**0.564**
Sulfate (mg/L)	**130**	**150**	**170**	-	**210**	**270**	-	-	**320**	**120**	-	**150**
pH (lab) (su)	**7.23**	**7.25**	**7.03**	-	**7.17**	**7.15**	-	-	**7.17**	**7.1**	-	**1.50**
TDS (mg/L)	**570**	**570**	**610**	-	**740**	**680**	-	-	**780**	**590**	-	**2900**
Antimony, Total (mg/L)	-	-	< 0.0030	< 0.0030	-	< 0.0030	< 0.0030	< 0.0030	-	< 0.0030	< 0.0030	-
Arsenic, Total (mg/L)	**0.0049**	**0.0052**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Barium, Total (mg/L)	**0.081**	**0.080**	**0.063**	**0.075**	**0.072**	**0.074**	**0.083**	**0.082**	**0.086**	**0.1**	**0.10**	**0.11**
Beryllium, Total (mg/L)	-	-	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-
Cadmium, Total (mg/L)	-	-	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-
Chromium, Total (mg/L)	< 0.0040	< 0.0040	**0.028**	**0.0046**	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cobalt, Total (mg/L)	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Iron, Total (mg/L)	**6.7**	**6.7**	**0.31**	-	**0.089**	**0.019**	-	-	**0.23**	**0.037**	-	**0.39**
Lead, Total (mg/L)	-	-	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-
Lithium, Total (mg/L)	**0.022**	**0.023**	< 0.020	**0.021**	**0.023**	< 0.020	**0.017**	**0.018**	< 0.020	< 0.020	**0.020**	**0.023**
Magnesium, Total (mg/L)	**18**	**18**	**28**	-	**32**	**32**	-	-	**38**	**20**	-	**23**
Manganese, Total (mg/L)	**0.49**	**0.50**	**0.013**	-	**0.0075**	< 0.0010	-	-	**0.0068**	**0.0013**	-	**0.0061**
Mercury, Total (mg/L)	< 0.00020	-	< 0.00020	< 0.00020	-	< 0.00020	< 0.00020	< 0.00020	-	< 0.00020	< 0.00020	-
Molybdenum, Total (mg/L)	**0.54**	**0.77**	**0.043**	**0.012**	**0.023**	**0.29**	**0.23**	**0.23**	**0.30**	**0.69**	**0.86**	**1.1**
Potassium, Total (mg/L)	**13**	**15**	**5.5**	-	**5.7**	**8.9**	-	-	**9.2**	**11**	-	**10**
Selenium, Total (mg/L)	< 0.0010	< 0.0010	< 0.0010	**0.0082**	**0.0022**	**0.0052**	**0.0021**	**0.0022**	**0.023**	**0.0044**	**0.011**	**0.0047**
Sodium, Total (mg/L)	**47**	**69**	**30**	-	**28**	**42**	-	-	**47**	**27**	-	**28**
Thallium, Total (mg/L)	-	-	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	-
Aluminum, Dissolved (mg/L)	**0.022**	-	**0.065**	-	-	< 0.010	-	-	-	< 0.010	-	-
Aluminum, Total (mg/L)	-	**0.037**	**0.14**	-	**0.055**	**0.023**	-	-	**0.18**	**0.034**	-	**0.12**
Iron, Dissolved (mg/L)	**6.9**	< 0.010	**0.12**	-	< 0.010	< 0.010	-	-	< 0.010	**0.026**	-	< 0.010
Manganese, Dissolved (mg/L)	**0.52**	**0.44**	**0.0092**	-	< 0.0010	< 0.0010	-	-	< 0.0010	< 0.0010	-	**0.0049**
Molybdenum, Dissolved (mg/L)	**0.56**	**0.75**	**0.046**	-	**0.019**	**0.31**	-	-	**0.32**	**0.72**	-	**1.1**
Phosphorus, Total (mg/L)	**0.35**	**0.38**	< 0.05	-	< 0.05	< 0.05	-	-	**0.06**	< 0.05	-	< 0.05
Silica, Total (mg/L)	**27**	**27**	**23**	-	**29**	**25**	-	-	**27**	**24**	-	**25**
Silicon, Total (mg/L)	**13**	**13**	**11**	-	**14**	**12**	-	-	**12**	**11**	-	**12**
Alkalinity, Bicarbonate (as CaCO3), Total (mg/L)	**310**	**350**	**320**	-	**320**	**290**	-	-	**340**	**350**	-	**420**
Temperature, Lab (Deg C)	**14**	**7.9**	**9.8**	-	**9.9**	**9.9**	-	-	**13**	**8.5**	-	**13**
Ferrous Iron (mg/L)	< 0.20	< 0.20	< 0.20	-	< 0.20	< 0.20	-	-	< 0.20	< 0.20	-	< 0.20
Nitrate (as N), Total (mg/L)	< 0.03	< 0.50	< 0.03	-	**1.2**	**0.68**	-	-	**1.1**	**0.43**	-	**0.30**
Nitrite (as N), Total (mg/L)	< 0.15	< 0.50	< 0.15	-	< 0.50	< 0.15	-	-	< 0.30	< 0.15	-	< 0.30
Sulfide (mg/L)	< 0.10	< 0.025	< 0.025	-	< 0.025	< 0.025	-	-	< 0.025	< 0.025	-	< 0.025
Total Organic Carbon (mg/L)	**2.5**	**2.5**	**1.5**	-	**1.8**	**2**	-	-	**1.8**	**1.7**	-	**2.1**
Total Organic Carbon Soluble (mg/L)	**2.6**	**2.7**	**1.7**	-	**2.2**	**1.1**	-	-	**1.8**	**1.8**	-	**2.4**
Radium-226 & 228, Combined (pCi/L)	< 0.606 ± 0.560 (0.501)	**1.34 ± 0.614479 (0.779)**	**1.03 ± 0.859 (0.762)**	**0.491 ± 0.505 (0.719)**	< 1.48 ± 0.706 (0.848)	< 0.2 ± 0.82 (0.857)	**0.756 ± 0.601 (0.786)**	**0.61 ± 0.469 (0.634)**	< 0.622 ± 0.678 (1.03)	< 0.356 ± 0.921 (0.999)	**2.45 ± 0.862 (0.658)**	**0.794 ± 0.745 (1.03)**

Notes:

Bold value: *Detection above laboratory reporting limit or minimum detectable concentration (MDC). Radiological results are presented as activity plus or minus uncertainty with MDC.*

µS/cm = micro Siemens per centimeter
Deg C = degrees Celsius
ft btoc = feet below top of casing
mg/L = milligrams per liter
N/A = Not Applicable
NTU = Nephelometric Turbidity Unit
pCi/L = picoCuries per liter
su = standard unit
TDS = total dissolved solids
TOC = top of casing

TABLE III
SUMMARY OF ANALYTICAL RESULTS - NATURE AND EXTENT
NEW MADRID POWER PLANT - POND 003
NEW MADRID, MISSOURI

Location	Downgradient											
	P-4	P-4	P-5	P-5	P-5	HAB-21-OWN	HAB-21-OWN	HAB-22-OWN	HAB-22-OWN	HAB-23-OWN	HAB-23-OWN
Measure Point (TOC)	311.067	311.067	301.968	301.968	301.968	321.03	321.03	310.42	310.42	314.29	314.29
Sample Name	P-4	P-4	P-5	P-5	P-5	HAB-21-OWN	HAB-21-OWN	HAB-22-OWN	HAB-22-OWN	HAB-23-OWN	HAB-23-OWN
Sample Date	02/07/2025	05/07/2025	02/13/2025	05/08/2025	09/09/2025	02/07/2025	09/12/2025	02/07/2025	09/12/2025	02/10/2025	09/11/2025
Depth to Water (ft btoc)	44.80	31.70	38.30	25.52	33.72	59.43	64.19	50.64	48.22	50.15	51.16
Temperature (Deg C)	17.04	17.03	15.66	16.60	18.24	20.37	23.76	19.34	22.31	21.53	22.49
Conductivity, Field (µS/cm)	837	1130	966	886	906	651	1510	0	1030	725	1660
Dissolved Oxygen (mg/L)	4.18	3.54	0.00	0.14	0.00	7.09	2.99	8.24	1.23	1.15	3.23
ORP (mV)	292	208	-68	-68	-71	18	79	-12	-52	103	178
Turbidity, Field (NTU)	9.8	0.0	1.6	0.0	6.9	0.00	1.1	389	3.12	103	2.0
pH, Field (SU)	6.88	7.43	6.47	5.41	6.22	7.38	6.88	6.61	6.48	7.18	7.25
Boron, Total (mg/L)	**0.65**	-	**4.1**	-	**4.0**	**1.0**	**1.8**	**3.5**	**3.2**	**3.1**	**6.4**
Calcium, Total (mg/L)	**120**	-	**130**	-	**130**	**110**	**220**	**120**	**140**	**120**	**260**
Chloride (mg/L)	**19**	-	**11**	-	**8.8**	**20**	**13**	**16**	**17**	**15**	**10**
Fluoride (mg/L)	**0.367**	**0.353**	**0.270**	< 0.250	< 0.250	**0.302**	**0.340**	**0.565**	**0.530**	**0.491**	**0.402**
Sulfate (mg/L)	**140**	-	**110**	-	**110**	**240**	**590**	**150**	**150**	**140**	**220**
pH (lab) (su)	**7.17**	-	**7.01**	-	**6.76**	**7.38**	**7.34**	**6.97**	**7.08**	**7.43**	**7.53**
TDS (mg/L)	**540**	-	**540**	-	**540**	**570**	**1100**	**530**	**540**	**530**	**980**
Antimony, Total (mg/L)	< 0.0030	< 0.0030	-	< 0.0030	-	< 0.0030	-	< 0.0030	-	-	-
Arsenic, Total (mg/L)	< 0.0010	< 0.0010	**0.0054**	**0.0066**	**0.0048**	**0.0012**	**0.0010**	**0.0099**	**0.012**	< 0.0010	< 0.0010
Barium, Total (mg/L)	**0.15**	**0.086**	**0.11**	**0.12**	**0.11**	**0.073**	**0.11**	**0.16**	**0.19**	**0.11**	**0.22**
Beryllium, Total (mg/L)	< 0.0010	< 0.0010	-	< 0.0010	-	< 0.0010	-	< 0.0010	-	-	-
Cadmium, Total (mg/L)	< 0.0010	< 0.0010	-	< 0.0010	< 0.0010	< 0.0010	-	< 0.0010	-	-	-
Chromium, Total (mg/L)	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cobalt, Total (mg/L)	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	**0.0024**	**0.0020**	< 0.0020	< 0.0020
Iron, Total (mg/L)	**0.013**	-	**15**	-	**11**	**0.020**	**0.014**	**2.8**	**3.9**	-	**0.019**
Lead, Total (mg/L)	< 0.0010	< 0.0010	-	< 0.0010	-	< 0.0010	-	< 0.0010	-	-	-
Lithium, Total (mg/L)	**0.027**	**0.028**	**0.015**	**0.017**	< 0.020	< 0.020	**0.016**	< 0.020	**0.018**	**0.023**	**0.040**
Magnesium, Total (mg/L)	**23**	-	**25**	-	**22**	**29**	**56**	**27**	**29**	-	**68**
Manganese, Total (mg/L)	< 0.0010	-	**0.75**	-	**0.48**	< 0.0010	< 0.0010	**2.1**	**1.6**	-	< 0.0010
Mercury, Total (mg/L)	< 0.00020	< 0.00020	< 0.00020	< 0.00020	-	< 0.00020	-	< 0.00020	-	< 0.00020	-
Molybdenum, Total (mg/L)	**0.016**	**0.026**	**0.27**	**0.29**	**0.26**	**0.058**	**0.077**	**0.37**	**0.18**	**0.30**	**0.14**
Potassium, Total (mg/L)	**11**	-	**7.6**	-	**8.2**	**5.7**	**7.5**	**5.4**	**5.9**	-	**13**
Selenium, Total (mg/L)	**0.018**	**0.017**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.0018**	**0.0017**	**0.0033**	**0.0012**	**0.0034**
Sodium, Total (mg/L)	**42**	-	**23**	-	**25**	**31**	**42**	**36**	**35**	-	**55**
Thallium, Total (mg/L)	< 0.0010	< 0.0010	-	< 0.0010	-	< 0.0010	-	< 0.0010	-	-	-
Aluminum, Dissolved (mg/L)	< 0.010	-	< 0.010	-	-	< 0.010	-	< 0.010	-	-	-
Aluminum, Total (mg/L)	< 0.020	-	-	-	**0.024**	**0.029**	**0.023**	**0.16**	**0.47**	-	**0.026**
Iron, Dissolved (mg/L)	< 0.010	-	**15**	-	**0.047**	< 0.010	< 0.010	**1.2**	**2.8**	-	< 0.010
Manganese, Dissolved (mg/L)	< 0.0010	-	**0.77**	-	**0.45**	< 0.0010	**0.0016**	**2.1**	**1.7**	-	< 0.0010
Molybdenum, Dissolved (mg/L)	**0.044**	-	**0.28**	-	**0.24**	**0.061**	**0.073**	**0.38**	**0.18**	-	**0.14**
Phosphorus, Total (mg/L)	< 0.05	-	**0.18**	-	**0.17**	**0.15**	**0.14**	**0.51**	**0.49**	-	**0.12**
Silica, Total (mg/L)	**23**	-	**25**	-	**25**	**19**	**21**	**30**	**27**	-	**28**
Silicon, Total (mg/L)	**11**	-	**12**	-	**12**	**9.1**	**10**	**14**	**13**	-	**13**
Alkalinity, Bicarbonate (as CaCO3), Total (mg/L)	**300**	-	**310**	-	**310**	**160**	**260**	**300**	**350**	-	**740**
Temperature, Lab (Deg C)	**9.8**	-	**12**	-	**9.4**	**18**	**8.1**	**17**	**7.7**	**14**	**7.3**
Ferrous Iron (mg/L)	< 0.20	-	< 0.20	-	**0.92**	< 0.20	< 0.20	< 0.20	< 0.20	-	< 0.20
Nitrate (as N), Total (mg/L)	**0.12**	-	**0.29**	-	< 0.50	**0.21**	**0.40**	**0.28**	< 0.03	-	**0.42**
Nitrite (as N), Total (mg/L)	< 0.15	-	< 0.15	-	< 0.50	< 0.15	< 0.15	< 0.15	< 0.15	-	< 0.15
Sulfide (mg/L)	< 0.025	-	< 0.025	-	< 0.025	< 0.10	< 0.025	< 0.10	< 0.025	-	< 0.025
Total Organic Carbon (mg/L)	**1.6**	-	**2.2**	-	**2.2**	**0.91**	**6.6**	**3.6**	**3.7**	-	**2.3**
Total Organic Carbon Soluble (mg/L)	**1.6**	-	**2.2**	-	**2.5**	**1.3**	**4.6**	**3.6**	**3.4**	-	**2.5**
Radium-226 & 228, Combined (pCi/L)	< 0.130 ± 0.946 (1.03)	**0.462 ± 0.645 (0.910)**	**1.14 ± 0.688 (0.488)**	**1.48 ± 0.650 (0.663)**	< 2.11 ± 0.758 (0.851)	**2.07 ± 1.25 (0.874)**	< 0.743 ± 0.558914 (0.827)	**0.836 ± 0.623 (0.549)**	**0.919 ± 0.592443 (0.802)**	**0.531 ± 0.633 (0.543)**	**0.541 ± 0.548514 (0.767)**

Notes:

Bold value: *Detection above laboratory reporting limit or minimum detectable concentration (MDC). Radiological results are presented as activity plus or minus uncertainty with MDC.*

µS/cm = micro Siemens per centimeter
Deg C = degrees Celsius
ft btoc = feet below top of casing
mg/L = milligrams per liter
N/A = Not Applicable
NTU = Nephelometric Turbidity Unit
pCi/L = picoCuries per liter
su = standard unit
TDS = total dissolved solids
TOC = top of casing

TABLE III
SUMMARY OF ANALYTICAL RESULTS - NATURE AND EXTENT
NEW MADRID POWER PLANT - POND 003
NEW MADRID, MISSOURI

Location	Downgradient										
	HAB-24-OWN	HAB-24-OWN	HAB-25-OWN	HAB-25-OWN	HAB-26-OWN	HAB-26-OWN	HAB-27-OWN	HAB-27-OWN	HAB-28-OWN	HAB-28-OWN	HAB-29-OWN
Measure Point (TOC)	314.31	314.31	318.76	318.76	313.9	313.9	306.27	306.27	311.45	311.45	306.56
Sample Name	HAB-24-OWN	HAB-24-OWN	HAB-25-OWN	HAB-25-OWN	HAB-26-OWN	HAB-26-OWN	HAB-27-OWN	HAB-27-OWN	HAB-28-OWN	HAB-28-OWN	HAB-29-OWN
Sample Date	02/09/2025	09/11/2025	02/08/2025	09/11/2025	02/08/2025	09/11/2025	02/09/2025	09/11/2025	02/09/2025	09/11/2025	02/08/2025
Depth to Water (ft btoc)	51.49	56.66	55.65	52.42	53.13	51.17	43.97	48.76	50.33	50.40	46.03
Temperature (Deg C)	19.67	21.80	19.33	20.10	22.01	23.61	18.06	19.93	20.60	22.44	18.29
Conductivity, Field (µS/cm)	818	1210	832	1310	1050	1750	775	1020	916	1690	1350
Dissolved Oxygen (mg/L)	5.87	3.55	0.00	0.11	0.00	0.13	5.98	5.21	0.93	1.49	0.00
ORP (mV)	140	199	-18	52	-39	52	128	198	85	180	-5
Turbidity, Field (NTU)	0.0	3.3	47.4	10.8	1.7	0.8	0.1	2.4	0.0	13.9	3.4
pH, Field (SU)	6.82	6.83	6.52	6.64	7.11	7.08	6.86	7.13	6.92	6.90	6.78
Boron, Total (mg/L)	**2.9**	**3.4**	**11**	**13**	**20**	**15**	**7.2**	**6.2**	**6.2**	**12**	**5.8**
Calcium, Total (mg/L)	**160**	**190**	**120**	**130**	**150**	**220**	**150**	**160**	**150**	**270**	**250**
Chloride (mg/L)	**18**	**18**	**6.5**	**5.7**	**4.9**	< 5.0	**16**	**18**	**11**	**5.1**	**2.6**
Fluoride (mg/L)	**0.632**	**0.589**	**1.43**	**1.38**	**1.09**	**1.20**	**0.852**	**0.975**	**0.491**	**0.548**	**0.440**
Sulfate (mg/L)	**180**	**200**	**140**	**250**	**280**	**140**	**160**	**180**	**150**	**180**	**99**
pH (lab) (su)	**7.18**	**7.06**	**7.04**	**6.94**	**7.31**	**7.31**	**7.26**	**7.50**	**7.17**	**7.15**	**7.04**
TDS (mg/L)	**670**	**740**	**610**	**800**	**880**	**1000**	**600**	**600**	**700**	**1100**	**960**
Antimony, Total (mg/L)	-	-	-	-	-	-	-	-	-	-	-
Arsenic, Total (mg/L)	< 0.0010	< 0.0010	**0.023**	**0.013**	**0.0038**	**0.0021**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.0015**
Barium, Total (mg/L)	**0.13**	**0.090**	**0.079**	**0.097**	**0.067**	**0.10**	**0.11**	**0.11**	**0.12**	**0.19**	**0.14**
Beryllium, Total (mg/L)	-	-	-	-	-	-	-	-	-	-	-
Cadmium, Total (mg/L)	-	-	-	-	-	-	-	-	-	-	-
Chromium, Total (mg/L)	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040	< 0.0040
Cobalt, Total (mg/L)	< 0.0020	< 0.0020	**0.0054**	**0.0057**	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020	< 0.0020
Iron, Total (mg/L)	-	**0.021**	-	**0.39**	-	**0.056**	-	**0.025**	-	**0.074**	-
Lead, Total (mg/L)	-	-	-	-	-	-	-	-	-	-	-
Lithium, Total (mg/L)	**0.022**	**0.028**	**0.020**	**0.027**	**0.025**	**0.029**	< 0.020	**0.016**	**0.036**	**0.052**	**0.070**
Magnesium, Total (mg/L)	-	**34**	-	**24**	-	**59**	-	**18**	-	**43**	-
Manganese, Total (mg/L)	-	< 0.0010	-	**0.041**	-	**1.2**	-	< 0.0010	-	**0.0033**	-
Mercury, Total (mg/L)	< 0.00020	-	< 0.00020	-	< 0.00020	-	< 0.00020	-	< 0.00020	-	< 0.00020
Molybdenum, Total (mg/L)	**0.25**	**0.19**	**0.89**	**0.85**	**1.1**	**0.85**	**0.60**	**0.65**	**0.50**	**0.52**	**0.16**
Potassium, Total (mg/L)	-	**11**	-	**18**	-	**22**	-	**12**	-	**19**	-
Selenium, Total (mg/L)	< 0.0010	**0.0043**	< 0.0010	< 0.0010	< 0.0010	< 0.0010	**0.016**	**0.0058**	**0.0028**	**0.0055**	**0.28**
Sodium, Total (mg/L)	-	**35**	-	**130**	-	**110**	-	**38**	-	**76**	-
Thallium, Total (mg/L)	-	-	-	-	-	-	-	-	-	-	-
Aluminum, Dissolved (mg/L)	-	-	-	-	-	-	-	-	-	-	-
Aluminum, Total (mg/L)	-	**0.026**	-	**0.12**	-	**0.035**	-	**0.026**	-	**0.034**	-
Iron, Dissolved (mg/L)	-	< 0.010	-	**0.13**	-	**0.016**	-	< 0.010	-	< 0.010	-
Manganese, Dissolved (mg/L)	-	< 0.0010	-	**0.041**	-	**1.3**	-	< 0.0010	-	< 0.0010	-
Molybdenum, Dissolved (mg/L)	-	**0.19**	-	**0.86**	-	**0.88**	-	**0.67**	-	**0.50**	-
Phosphorus, Total (mg/L)	-	< 0.05	-	**0.48**	-	**0.14**	-	< 0.05	-	**0.053**	-
Silica, Total (mg/L)	-	**30**	-	**20**	-	**25**	-	**23**	-	**28**	-
Silicon, Total (mg/L)	-	**14**	-	**9.4**	-	**12**	-	**11**	-	**13**	-
Alkalinity, Bicarbonate (as CaCO3), Total (mg/L)	-	**410**	-	**450**	-	**850**	-	**310**	-	**790**	-
Temperature, Lab (Deg C)	**9.3**	**7.9**	**8.9**	**7.6**	**10**	**19**	**12**	**8.3**	**10**	**11**	**9.0**
Ferrous Iron (mg/L)	-	< 0.20	-	< 0.20	-	< 0.20	-	< 0.20	-	< 0.20	-
Nitrate (as N), Total (mg/L)	-	**1.4**	-	< 0.03	-	< 0.03	-	**1.1**	-	**0.20**	-
Nitrite (as N), Total (mg/L)	-	< 0.15	-	< 0.15	-	< 0.30	-	< 0.15	-	< 0.30	-
Sulfide (mg/L)	-	< 0.025	-	< 0.025	-	< 0.025	-	< 0.025	-	< 0.025	-
Total Organic Carbon (mg/L)	-	**1.9**	-	**4.3**	-	**3.8**	-	**1.3**	-	**2.8**	-
Total Organic Carbon Soluble (mg/L)	-	**2.2**	-	**4.2**	-	**4.0**	-	**1.5**	-	**2.9**	-
Radium-226 & 228, Combined (pCi/L)	**2.61 ± 1.083 (0.630)**	< 0.211 ± 0.46179 (0.726)	**1.20 ± 1.045 (0.612)**	< 0.340 ± 0.982961 (1.62)	**2.10 ± 1.062 (0.583)**	**0.452 ± 0.50261 (0.731)**	**0.508 ± 0.660 (0.528)**	**0.42 ± 0.499554 (0.799)**	**0.639 ± 0.603 (0.498)**	**1.44 ± 0.709146 (0.868)**	**1.75 ± 0.651 (0.381)**

Notes:

Bold value: *Detection above laboratory reporting limit or minimum detectable concentration (MDC). Radiological results are presented as activity plus or minus uncertainty with MDC.*

µS/cm = micro Siemens per centimeter
Deg C = degrees Celsius
ft btoc = feet below top of casing
mg/L = milligrams per liter
N/A = Not Applicable
NTU = Nephelometric Turbidity Unit
pCi/L = picoCuries per liter
su = standard unit
TDS = total dissolved solids
TOC = top of casing

TABLE III
SUMMARY OF ANALYTICAL RESULTS - NATURE AND EXTENT
NEW MADRID POWER PLANT - POND 003
NEW MADRID, MISSOURI

Location	Downgradient		
	HAB-29-OWN	**HAB-30-OWN**	**HAB-30-OWN**
Measure Point (TOC)	306.56	307.83	307.83
Sample Name	HAB-29-OWN	HAB-30-OWN	HAB-30-OWN
Sample Date	09/11/2025	02/08/2025	09/11/2025
Depth to Water (ft btoc)	42.48	47.00	44.85
Temperature (Deg C)	19.31	19.26	20.01
Conductivity, Field (µS/cm)	1690	1150	1080
Dissolved Oxygen (mg/L)	0.1	0.00	0.31
ORP (mV)	93	62	140
Turbidity, Field (NTU)	0.7	26.6	6.5
pH, Field (SU)	6.92	6.81	6.83
Boron, Total (mg/L)	**6.4**	**11**	**5.1**
Calcium, Total (mg/L)	**270**	**200**	**150**
Chloride (mg/L)	< 5.0	**4.7**	**9.1**
Fluoride (mg/L)	**0.543**	**0.250**	**0.293**
Sulfate (mg/L)	**120**	**150**	**98**
pH (lab) (su)	**7.22**	**6.99**	**7.25**
TDS (mg/L)	**1000**	**790**	**620**
Antimony, Total (mg/L)	-	-	-
Arsenic, Total (mg/L)	< 0.0010	< 0.0010	< 0.0010
Barium, Total (mg/L)	**0.16**	**0.18**	**0.16**
Beryllium, Total (mg/L)	-	-	-
Cadmium, Total (mg/L)	-	-	-
Chromium, Total (mg/L)	< 0.0040	< 0.0040	< 0.0040
Cobalt, Total (mg/L)	< 0.0020	< 0.0020	< 0.0020
Iron, Total (mg/L)	**0.055**	-	**0.044**
Lead, Total (mg/L)	-	-	-
Lithium, Total (mg/L)	**0.075**	**0.068**	**0.058**
Magnesium, Total (mg/L)	**52**	-	**31**
Manganese, Total (mg/L)	**0.065**	-	**0.084**
Mercury, Total (mg/L)	-	< 0.00020	-
Molybdenum, Total (mg/L)	**0.20**	**0.15**	**0.082**
Potassium, Total (mg/L)	**23**	-	**19**
Selenium, Total (mg/L)	**0.0072**	< 0.0010	**0.0012**
Sodium, Total (mg/L)	**59**	-	**37**
Thallium, Total (mg/L)	-	-	-
Aluminum, Dissolved (mg/L)	-	-	-
Aluminum, Total (mg/L)	< 0.020	-	**0.032**
Iron, Dissolved (mg/L)	< 0.010	-	< 0.010
Manganese, Dissolved (mg/L)	**0.065**	-	**0.082**
Molybdenum, Dissolved (mg/L)	**0.20**	-	**0.083**
Phosphorus, Total (mg/L)	**0.12**	-	**0.06**
Silica, Total (mg/L)	**20**	-	**27**
Silicon, Total (mg/L)	**9.6**	-	**13**
Alkalinity, Bicarbonate (as CaCO3), Total (mg/L)	**840**	-	**440**
Temperature, Lab (Deg C)	**11**	**8.9**	**8.6**
Ferrous Iron (mg/L)	< 0.20	-	< 0.20
Nitrate (as N), Total (mg/L)	**0.11**	-	**0.66**
Nitrite (as N), Total (mg/L)	< 0.30	-	< 0.15
Sulfide (mg/L)	< 0.025	-	< 0.025
Total Organic Carbon (mg/L)	**4.1**	-	**2.0**
Total Organic Carbon Soluble (mg/L)	**4.1**	-	**2.3**
Radium-226 & 228, Combined (pCi/L)	**1.70 ± 0.667881 (0.815)**	**2.38 ± 0.887 (0.515)**	**0.683 ± 0.550391 (0.715)**

Notes:

Bold value: *Detection above laboratory reporting limit or minimum detectable concentration (MDC). Radiological results are presented as activity plus or minus uncertainty with MDC.*

µS/cm = micro Siemens per centimeter
Deg C = degrees Celsius
ft btoc = feet below top of casing
mg/L = milligrams per liter
N/A = Not Applicable
NTU = Nephelometric Turbidity Unit
pCi/L = picoCuries per liter
su = standard unit
TDS = total dissolved solids
TOC = top of casing

TABLE IV
BACKGROUND CONCENTRATIONS AND GROUNDWATER PROTECTION STANDARDS - AUGUST 2024
DETECTED APPENDIX IV CONSTITUENTS
ASSOCIATED ELECTRIC COOPERATIVE, INC.
NEW MADRID POWER PLANT - POND 003
MARSTON, MISSOURI

Constituent	Background Concentration (UTL)	Groundwater Protection Standard
Arsenic (mg/L)	0.0099	0.010*
Barium (mg/L)	0.800	2*
Chromium (mg/L)	0.023	0.1*
Cobalt (mg/L)	0.0058	0.006**
Fluoride (mg/L)	1.710	4.0*
Lithium (mg/L)	0.033	0.040**
Mercury (mg/L)	0.00087	0.002*
Molybdenum (mg/L)	0.010	0.100**
Radium 226 & 228 (pCi/L)	2.48	5*
Selenium (mg/L)	0.0039	0.05*

Notes:

1. Groundwater Protection Standards listed were utilized for statistical analyses for the August 2024 semiannual assessment monitoring sampling event.

** Value set equal to the maximum contaminant level.*

*** Value set based on 40 CFR § 257.95(h)(1)*

mg/L = milligrams per liter

pCi/L = picoCuries per liter

UTL = upper tolerance limit

TABLE V
BACKGROUND CONCENTRATIONS AND GROUNDWATER PROTECTION STANDARDS - FEBRUARY 2025
DETECTED APPENDIX IV CONSTITUENTS
ASSOCIATED ELECTRIC COOPERATIVE, INC.
NEW MADRID POWER PLANT - POND 003
MARSTON, MISSOURI

Constituent	Background Concentration (UTL)	Groundwater Protection Standard
Arsenic (mg/L)	0.0099	0.010*
Barium (mg/L)	0.800	2*
Chromium (mg/L)	0.023	0.1*
Cobalt (mg/L)	0.0058	0.006**
Fluoride (mg/L)	1.710	4.0*
Lithium (mg/L)	0.033	0.040**
Mercury (mg/L)	0.00087	0.002*
Molybdenum (mg/L)	0.010	0.100**
Radium 226 & 228 (pCi/L)	2.46	5*
Selenium (mg/L)	0.0039	0.05*

Notes:

1. Groundwater Protection Standards listed were utilized for statistical analyses for the February 2025 semiannual assessment monitoring sampling event.

** Value set equal to the maximum contaminant level.*

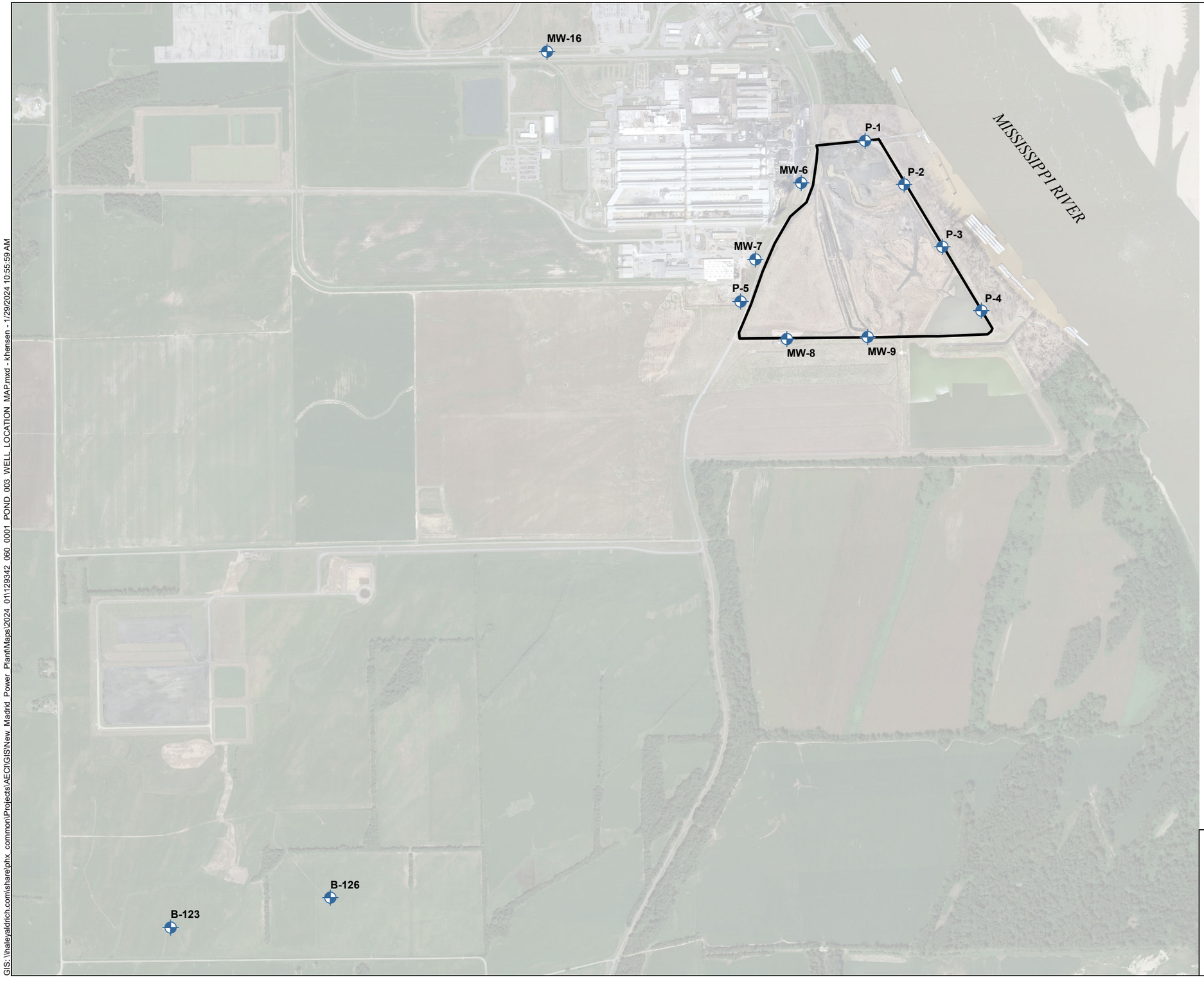
*** Value set based on 40 CFR § 257.95(h)(1)*

mg/L = milligrams per liter

pCi/L = picoCuries per liter

UTL = upper tolerance limit

FIGURES



LEGEND

MONITORING WELL

POND 003 BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. AERIAL IMAGERY SOURCE: GOOGLE EARTH, 6 SEPTEMBER 2021, AND UNMANNED AERIAL VEHICLE (UAV), 2 JUNE 2023

N

0 1,200 2,400

SCALE IN FEET

HALEY ALDRICH

ASSOCIATED ELECTRIC COOPERATIVE, INC.
NEW MADRID POWER GENERATING FACILITY
NEW MADRID COUNTY, MISSOURI

POND 003 MONITORING WELL LOCATION MAP

aeci

JANUARY 2026

FIGURE 1

GIS: \\haleyaldrich.com\share\phx_common\Projects\AECI\GIS\New Madrid Power Plant\Maps\2024_01\129342_060_0001_POND_003_WELL_LOCATION_MAP.mxd - khensen - 1/29/2024 10:55:59 AM

LEGEND

- NEW NATURE AND EXTENT MONITORING WELL
- NATURE AND EXTENT MONITORING WELL
- POND 003 BOUNDARY

NOTES

1. ALL LOCATIONS AND DIMENSIONS ARE APPROXIMATE.

2. LOCATIONS OF NEW NATURE AND EXTENT MONITORING WELLS MW-7I, MW-7L, MW-20L, AND MW-22L ARE APPROXIMATE AND WILL BE UPDATED ONCE A SURVEY HAS BEEN COMPLETED.

3. AERIAL IMAGERY SOURCE: GOOGLE EARTH, 6 SEPTEMBER 2021, AND UNMANNED AERIAL VEHICLE (UAV), 2 JUNE 2023

N

0 350 700

SCALE IN FEET

HALEY ALDRICH

ASSOCIATED ELECTRIC COOPERATIVE, INC.
NEW MADRID POWER GENERATING FACILITY
NEW MADRID COUNTY, MISSOURI

POND 003 NATURE AND EXTENT MONITORING WELL LOCATION MAP

aeci

JANUARY 2026

FIGURE 2

GIS: \\haleyaldrich.com\share\phx_common\Projects\AEC\GIS\New_Madrid_Power_Plant\Maps\2024_011129342_060_0002_POND_003_N&E_GROUNDWATER_MONITORING_WELL_LOCATION_MAP.mxd - khensen - 1/29/2024 11:03:50 AM