



ENVIRONMENTAL CONSULTATION & REMEDIATION

KPRG and Associates, Inc.

**ADDENDUM NO. 1 – ILLINOIS CCR COMPLIANCE – NATURE AND EXTENT
OF IMPACTS EVALUATION
POWERTON GENERATING STATION**

May 20, 2026

Ms. Sharene Shealey
Midwest Generation, LLC
529 E. Romeo Road
Romeoville, IL 60446

VIA E-MAIL

KPRG Project No. 10125

Re: Addendum No. 1 – Illinois CCR Compliance – Nature and Extent of Impacts
Evaluation, Powerton Generating Station, Pekin, IL

Dear Ms. Shealey:

Groundwater monitoring requirements in accordance with the Ill. Adm. Code Title 35, Part 845: Standards for the Disposal of Coal Combustion Residuals in Surface Impoundments (State CCR Rule) and the issued facility CCR Operating Permit 2024-CO-100029 (Permit), are ongoing for the ash pond monitoring wells located at the Midwest Generation, LLC (Midwest Generation) Powerton Generating Station. The noted Operating Permit was issued on July 3, 2024 and covers the operating and groundwater monitoring requirements for all four CCR Surface Impoundments. Specifically, these are:

- Ash Surge Basin (ASB) – Pond ID W1798010008-01
- Metal Cleaning Basin (MCB) – Pond ID W1798010008-03
- Ash By-pass Basin (ABB) – Pond ID W1798010008-04
- Former Ash Basin (FAB) – Pond ID W1798010008-05

Groundwater Protection Standards (GWPSs) are established by the Operating Permit under Special Conditions #21 and #22, for the Silty Clay/Silt Unit and the Sand and Gravel Unit, respectively. Groundwater sampling of the permit defined well network during the 4th quarter 2024 confirmed the following detections above the currently established GWPS:

Silty Clay/Silt Unit

- MW-14: sulfate, total dissolved solids (TDS), molybdenum and thallium.
- MW-18A: TDS.

Sand and Gravel Unit

- MW-07: arsenic and cobalt.

In addition, during the 1st quarter 2025, the following additional confirmed detections were noted above the currently established GWPS:

Sand and Gravel Unit

- MW-10: boron and cobalt.

The locations of these wells are shown on Figure 1. Based on these confirmed detections above the Permit established GWPSs, a Notification of Exceedances was made by Midwest Generation in accordance with the requirements of Section 845.650(d) and placed in the facility's operating record in accordance with Section 845.800(d)(16). In addition, the notification was posted on the Midwest Generation State CCR compliance website per Section 845.810(e). In conjunction with this Notification of Exceedances, the Midwest Generation Powerton Generating Station initiated defining the nature and extent of impacts associated with the release as required under Section 845.650(d)(1).

On June 9, 2025, KPRG and Associates, Inc. (KPRG) submitted the Illinois CCR Compliance – Nature and Extent of Impacts Evaluation for the Powerton Generating Station located in Pekin, Illinois. The objective of the study was to define the nature and extent of impacts in accordance with Section 845.650(d)(1). Field work for the assessment summarized in that report included:

- Collection of groundwater samples from other existing monitoring wells in the vicinity of the Ash By-pass Basin/Ash Surge Basin (ABB/ASB) and the Metals Cleaning Basin (MCB) that are not part of the identified Permit monitoring well sampling network. These wells include MW-08, MW-09, MW-11, MW-12R, MW-15, MW-17, MW-18, MW-19, and MW-23, and are referred to below as “assessment” monitoring wells.
- Installation and soil/groundwater sampling of a new sand and gravel unit assessment monitoring well, MW-24, located northwest, downgradient of well MW-07.
- Collection of two fill material samples from the berm fill of the ASB for analysis of total and synthetic precipitation leaching procedure (SPLP) CCR parameters.
- Water depth sounding of the intake canal.
- Collection of three surface water samples from above the base of the intake canal.
- Collection of two pore water samples from along the bank of the intake canal.

The various well and sample locations mentioned above are included on Figure 1. The conclusions of that report were:

“Relative to the silty clay/silt unit, the extent of sulfate, TDS, molybdenum and thallium impacts have been sufficiently defined in all directions. It is noted that the 1st quarter 2025 data did not indicate any groundwater impacts for molybdenum above its GWPS including for well MW-14 which had a confirmed detection above

the GWPS during the 2024 sampling. This suggests that the noted detection above the GWPS at MW-14 may have been a temporal or statistical anomaly as a review of previous data for that well also shows concentrations below the GWPS.

Relative to the sand and gravel unit, the extent of boron and cobalt impacts has been sufficiently defined in all directions. The extent of arsenic impacts has been defined in all directions except for downgradient to the northwest since new assessment monitoring well had a confirmed detection of arsenic of 0.021 mg/l which is still above the GWPS for arsenic of 0.010 mg/l.”

Subsequent groundwater sampling for molybdenum at location MW-14 continues to be below the GWPS of 0.10 mg/l for that parameter further confirming that the initial confirmed detection above the GWPS was a temporal or statistical anomaly.

It is noted that the above referenced downgradient sand and gravel monitoring well MW-24, which was installed as part of the nature and extent of impacts evaluation on the west side of the former intake channel, was found to have approximately 12 feet of ash within the boring column. Saturated conditions were not encountered within the ash. Saturated conditions were encountered within the sand and gravel unit at approximately 37 feet below ground surface (bgs) and the base of the well was set at approximately 45 feet bgs with 10-feet of screen. As noted above, groundwater samples from this well still detected arsenic at concentrations above the GWPS of 0.010 mg/l.

At the time of writing the initial Nature and Extent of Impacts Evaluation, it was recommended to potentially install an additional monitoring well northwest (downgradient) of assessment well MW-24. As previously noted, during the drilling of that well approximately 12 feet of ash was logged within the boring. Since that time, it has been determined based on background research that there is another source of ash associated with past historical practices prior to regulations which is not related to the subject regulated units (i.e., ABB/ASB and the MCB). That source is located west of the former intake channel and is reflected by the presence of ash within the boring column of assessment well MW-24. Therefore, at this time, it is not possible to distinguish whether the arsenic detected within assessment well MW-24 is associated with a potential release from the regulated units or whether it is associated with the noted historical source. The data from this well, however, can and will be used in groundwater modeling to be performed in support of the selected remedy for the subject regulated units.

Based on this additional information, the extent of arsenic impacts within the sand and gravel unit to the northwest of the regulated units is sufficiently defined at this time. Additional evaluation relative to the other historical source identified west of the former intake channel will be completed under the Federal CCR Rule sections dealing with various legacy ash issues.

KPRG appreciates the continued opportunity for providing our technical services to Midwest Generation on this project. If there are any questions, please contact me at 262-781-0475.

Sincerely,
KPRG and Associates, Inc.



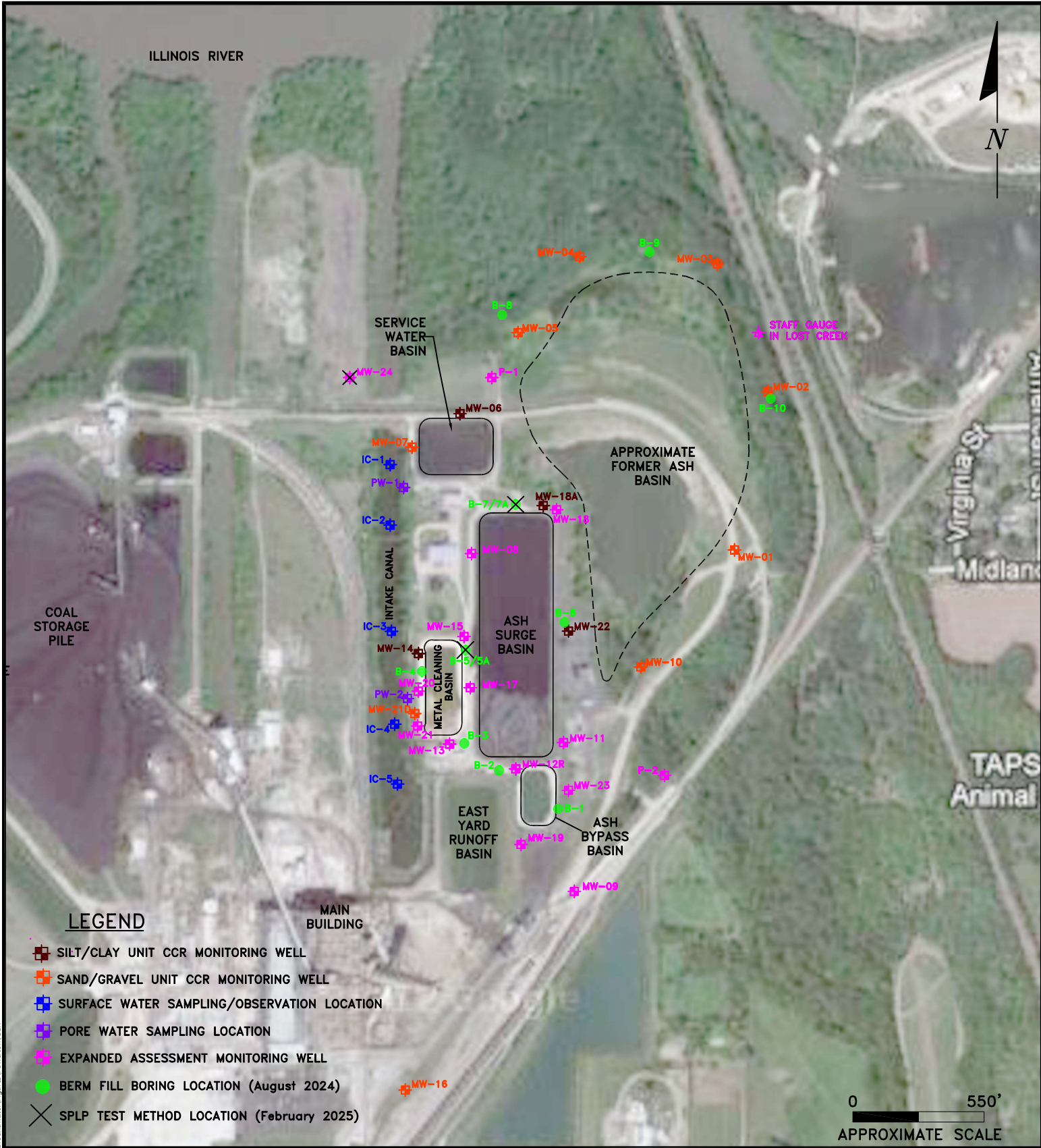
Richard R. Gnat, P.G.
Principal



Kaelyn Sperle
Project Geologist II

Attachment – Figure 1

cc: Jill Buckley, MWG
Kristen Gale, Nijman Franzetti, LLP
David Bacher, NRG
Joseph Kotas, MWG



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SITE FEATURES MAP

NATURE AND EXTENT OF IMPACTS EVALUATION

**POWERTON STATION
PEKIN, ILLINOIS**

Scale: 1" = 550'

Date: June 5, 2025

KPRG Project No. 10125

Figure 1