



**OHIO VALLEY ELECTRIC CORPORATION**

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Piketon, Ohio 45661  
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WRITER'S DIRECT DIAL NO:  
(740) 289-7259

January 30, 2026

**Delivered Electronically**

Mr. John Logue, Director  
Ohio Environmental Protection Agency  
50 West Town Street, Suite 700  
P.O. Box 1049  
Columbus, OH 43216-1049

Dear Mr. Logue:

**Re: Ohio Valley Electric Corporation - Kyger Creek Station  
2025 Annual Groundwater Monitoring and Corrective Action Report**

As required by 40 CFR 257.106(h)(1), the Ohio Valley Electric Corporation (OVEC) is providing notification to the State Director of the Ohio Environmental Protection Agency that the ninth Annual Groundwater and Corrective Actions Report has been completed in compliance with 40 CFR 257.90(e) for OVEC's Kyger Creek Station. The groundwater monitoring and corrective action report was prepared by AGES, Inc., the site's hydrogeologist, summarizing the findings in 2025. The report has been placed in the facility's operating record in accordance with 40 CFR 257.105(h)(1), as well as, on the company's publicly accessible internet site in accordance with 40 CFR 257.107(h)(1), which can be viewed at <http://www.ovec.com/CCRCompliance.php> .

If you have any questions, or require any additional information, please contact me at (740) 289-7259 or contact Gabe Coriell at (740)289-7267.

Sincerely,

A handwritten signature in black ink, appearing to read "Jeremy Galloway".

Jeremy Galloway  
Environmental Specialist

JDG:zsh



**Stantec Consulting Services Inc.**  
10200 Alliance Road, Suite 300  
Cincinnati OH 45242-4754

January 30, 2026

Project/File: 173411097

**Mr. Jeremy Galloway**

Ohio Valley Electric Corporation  
Indiana-Kentucky Electric Corporation  
3932 U.S. Route 23  
P.O. Box 468  
Piketon, Ohio 45661

**Reference:** **2025 Annual Groundwater Monitoring and Corrective Action Report**  
**EPA Final Coal Combustion Residuals (CCR) Rule**  
**Kyger Creek Generating Station**  
**Cheshire, Ohio**

Dear Mr. Galloway,

The EPA Final CCR Rule requires owners or operators of existing CCR landfills and surface impoundments to prepare an 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 40 CFR 257.90(e). For the Ohio Valley Electric Corporation (OVEC), this applies to the Kyger Creek Station's South Fly Ash Pond, Boiler Slag Pond, and CCR Landfill.

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

1. A map, aerial image, or diagram showing the CCR unit and all background (or upgradient) and downgradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR unit;
2. 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;
3. 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 downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs;
4. 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 level); and
5. Other information required to be included in the annual report as specified in §§257.90 through 257.98.

**Reference:** 2025 Annual Groundwater Monitoring and Corrective Action Report  
EPA Final Coal Combustion Residuals (CCR) Rule  
Kyger Creek Generating Station  
Cheshire, Ohio

6. 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:
  - i. 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;
  - ii. 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;
  - iii. 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):
    - A. Identify those constituents listed in appendix III to this part and the names of the monitoring wells associated with such an increase; and
    - B. Provide the date when the assessment monitoring program was initiated for the CCR unit.
  - iv. 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(a) include all of the following:
    - A. Identify those constituents listed in appendix IV to this part and the names of the monitoring wells associated with such an increase;
    - B. Provide the date when the assessment of corrective measures was initiated for the CCR unit;
    - C. Provide the date when the public meeting was held for the assessment of corrective measures for the CCR unit; and
    - D. Provide the date when the assessment of corrective measures was completed for the CCR unit.
  - v. Whether a remedy was selected pursuant to § 257.97 during the current annual reporting period, and if so, the date of remedy selection; and
  - vi. Whether remedial activities were initiated or are ongoing pursuant to § 257.98 during the current annual reporting period.

IKEC has retained Applied Geology and Environmental Science, Inc. of Clinton, Pennsylvania (AGES) to perform the Kyger Creek Station's groundwater monitoring and corrective action support under the EPA Final CCR Rule. The 2025 CCR Regulation Groundwater Monitoring and Corrective Action Report (GWCAR) was prepared by AGES to present the annual groundwater monitoring at the South Fly Ash Pond, Boiler Slag Pond, and CCR Landfill of the Clifty Creek Station. Stantec Consulting Services Inc. (Stantec) has reviewed AGES (2026), and it meets the requirements specified in 40 CFR 257.90(e).

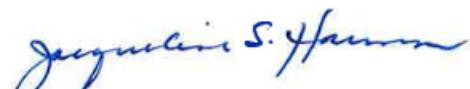
January 30, 2026  
Mr. Jeremy Galloway  
Page 3 of 3

**Reference:** 2025 Annual Groundwater Monitoring and Corrective Action Report  
EPA Final Coal Combustion Residuals (CCR) Rule  
Kyger Creek Generating Station  
Cheshire, Ohio

Please contact us with any questions or concerns. We appreciate the opportunity to continue to work with the Kyger Creek Generating Station and the Ohio Valley Electric Corporation.

Regards,

**STANTEC CONSULTING SERVICES INC.**



**Jacqueline S. Harmon** PE  
Project Manager  
Phone: (513) 842-8200 EXT 8220  
jacqueline.harmon@stantec.com

Attachment AGES (2026). Coal Combustion Residuals Regulation, 2025 Groundwater Monitoring and Corrective Action Report, Ohio Valley Electric Corporation. Kyger Creek Station, Cheshire, Ohio, January.

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# AGES

Applied Geology And Environmental Science, Inc.

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Clinton, PA 15026

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## **COAL COMBUSTION RESIDUALS REGULATION 2025 GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT**

**OHIO VALLEY ELECTRIC CORPORATION  
KYGER CREEK STATION  
CHESHIRE, OHIO**

**JANUARY 2026**

**Prepared for:**

**OHIO VALLEY ELECTRIC CORPORATION**

**Prepared by:**

**APPLIED GEOLOGY AND ENVIRONMENTAL SCIENCE, INC.**

**COAL COMBUSTION RESIDUALS REGULATION  
2025 GROUNDWATER MONITORING AND  
CORRECTIVE ACTION REPORT  
OHIO VALLEY ELECTRIC CORPORATION  
KYGER CREEK STATION  
CHESHIRE, OHIO**

**JANUARY 2026**

**Prepared for:**

**OHIO VALLEY ELECTRIC CORPORATION**

**Prepared by:**

**Applied Geology and Environmental Science, Inc.**

*Bethany Flaherty*

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**Bethany Flaherty**  
Principal Scientist I

*Robert W. King*

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**Robert W. King, P.G.**  
Chief Hydrogeologist

**COAL COMBUSTION RESIDUALS REGULATION  
2025 GROUNDWATER MONITORING AND  
CORRECTIVE ACTION REPORT  
OHIO VALLEY ELECTRIC CORPORATION  
KYGER CREEK STATION  
CHESHIRE, OHIO**

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2025 GROUNDWATER MONITORING AND  
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KYGER CREEK STATION  
CHESHIRE, OHIO**

**LIST OF ACRONYMS**

AGES	Applied Geology and Environmental Science, Inc.
ASD	Alternate Source Demonstration
BSP	Boiler Slag Pond
CCR	Coal Combustion Residuals
GMPP	Groundwater Monitoring Program Plan
GWPS	Groundwater Protection Standard
Landfill	Class III Residual Waste Landfill
LCL	Lower Confidence Limit
MCL	Maximum Contaminant Level
OEPA	Ohio Environmental Protection Agency
OVEC	Ohio Valley Electric Corporation
RCRA	Resource Conservation and Recovery Act
StAP	Statistical Analysis Plan
SFAP	South Fly Ash Pond
Stantec	Stantec Consulting Services Inc.
SSI	Statistically Significant Increase
TDS	Total Dissolved Solids
ug/L	Micrograms per liter
U.S. EPA	United States Environmental Protection Agency

**COAL COMBUSTION RESIDUALS REGULATION  
2025 GROUNDWATER MONITORING AND  
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KYGER CREEK STATION  
CHESHIRE, OHIO**

**EXECUTIVE SUMMARY**

The Kyger Creek Station, located in Cheshire, Ohio, is a 1.1 gigawatt coal-fired generating station operated by Ohio Valley Electric Corporation (OVEC). The Kyger Creek Station has five (5), 217-megawatt generating units and has been in operation since 1955. Beginning in 1955, Coal Combustion Residuals (CCRs) were sluiced to surface impoundments located in the plant site. During the course of plant operations, CCRs have been managed in various units at the station.

There are three (3) CCR units at the Kyger Creek Station:

- Class III Residual Waste Landfill (Landfill);
- Boiler Slag Pond (BSP); and
- South Fly Ash Pond (SFAP).

A brief overview of the current status of groundwater monitoring and corrective action programs for the CCR units is provided below:

**Landfill**

At the start of this 2025 reporting period, the Landfill was operating under the Detection Monitoring program in accordance with §257.94 of the CCR Rule. The 15<sup>th</sup> and 16<sup>th</sup> rounds of Detection Monitoring were conducted in March/April and October 2025, respectively. Based on the sampling results, it was determined that there were no SSIs for Appendix III constituents over background for either Detection Monitoring Events. Prior to the March 2025 sampling event, wells CCR-1Bu and IMW-1Bu were abandoned due to a Landfill expansion project. Therefore, the Landfill will remain operating under the Detection Monitoring program in accordance with §257.94 of the CCR Rule.

**BSP**

At the start of this 2025 reporting period, the BSP was operating under the Assessment Monitoring program in accordance with §257.95 of the CCR Rule. Based on exceedances of the Groundwater Protection Standard (GWPS) for an Appendix IV constituent (Arsenic at well KC-15-07), an assessment of corrective measures was initiated on May 15, 2019. An Assessment of Corrective

Measures Report was completed on September 19, 2019 (Revision 1.0, November 2020); a public meeting was held on November 6, 2019.

The 14<sup>th</sup> and 15<sup>th</sup> rounds of Assessment Monitoring were conducted in March/April and October 2025, respectively. Based on the sampling results, it was determined that there were SSIs over background for Appendix III constituents. SSIs were confirmed in wells KC-15-04 (Sulfate and Total Dissolved Solids [TDS]), KC-15-07 (Chloride and TDS), and KC-15-08 (Calcium, Sulfate, and TDS) during the March/April 2025 Assessment Monitoring Event. During the October 2025 Assessment Monitoring Event, SSIs were confirmed in well KC-15-04 (Fluoride) and KC-15-08 (Boron, Calcium, Sulfate, and TDS).

Arsenic, an Appendix IV constituent, exceeded the GWPS in well KC-15-07 during both Assessment Monitoring Events. Arsenic did not exceed the GWPS in wells located at the property boundary downgradient of the BSP indicating that Arsenic exceedances are confined to the site. Based on these results, the BSP will remain operating under the Assessment Monitoring program in accordance with §257.95 of the CCR Rule.

To support the selection of a remedy, field monitoring activities, including the collection of water level measurements and ongoing groundwater sampling, were performed during 2025. Although a remedy was not selected pursuant to §257.97 of the CCR Rule during this current annual reporting period, the continued evaluation of remedial activities pursuant to §257.97 and §257.98 of the CCR Rule will continue during the 2026 annual reporting period. The unit is currently undergoing closure by removal activities.

## **SFAP**

At the start of this 2025 reporting period, the SFAP was operating under the Assessment Monitoring program in accordance with §257.95 of the CCR Rule. The 14<sup>th</sup> and 15<sup>th</sup> rounds of Assessment Monitoring were conducted in March/April and October 2025, respectively. Based on the sampling results, it was determined that there were SSIs over background for Appendix III constituents. During the March/April 2025 Assessment Monitoring Event, SSIs were confirmed in wells KC-15-18 (Calcium, Chloride, and TDS), KC-15-20 (Calcium), and KC-15-21 (Calcium). During the October 2025 Assessment Monitoring Event, SSIs were confirmed in wells KC-15-18 (Calcium, Chloride, Sulfate, and TDS), KC-15-20 (Calcium), and KC-15-21 (Calcium).

As part of the Assessment Monitoring program, concentrations of the Appendix IV constituents are compared to the applicable GWPS. No exceedances were noted during the March/April and October 2025 Assessment Monitoring events for any well included in the approved monitoring program. The SFAP will remain operating under the Assessment Monitoring program in accordance with §257.95 of the CCR Rule. The unit is currently undergoing closure in place activities.

**COAL COMBUSTION RESIDUALS REGULATION  
2025 GROUNDWATER MONITORING AND  
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OHIO VALLEY ELECTRIC CORPORATION  
KYGER CREEK STATION  
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## **1.0 INTRODUCTION**

On December 19, 2014, the United States Environmental Protection Agency (U.S. EPA) issued their final Coal Combustion Residuals (CCR) regulation which regulates CCR as a non-hazardous waste under Subtitle D of Resource Conservation and Recovery Act (RCRA) and became effective six (6) months from the date of its publication (April 17, 2015) in the Federal Register, referred to as the “CCR Rule.” The rule applies to new and existing landfills, and surface impoundments used to dispose of or otherwise manage CCR generated by electric utilities and independent power producers. Because the rule was promulgated under Subtitle D of RCRA, it does not require regulated facilities to obtain permits, does not require state adoption, and cannot be enforced by U.S. EPA.

This Groundwater Monitoring and Corrective Action Report has been prepared in accordance with §257.90 (e) of the CCR Rule and documents the status of the groundwater monitoring and corrective action program for each CCR unit, summarizes the key actions completed during 2025, describes any problems encountered, discusses actions to resolve the problems, and projects key activities for the upcoming year.

## **2.0 BACKGROUND**

The Kyger Creek Station, located in Cheshire, Ohio, is a 1.1 gigawatt coal-fired generating station operated by Ohio Valley Electric Corporation (OVEC). The Kyger Creek Station has five (5), 217-megawatt generating units and has been in operation since 1955. Beginning in 1955, CCRs were sluiced to surface impoundments located in the plant site. During the course of plant operations, CCRs have been managed in various units at the station.

There are three (3) CCR units at the Kyger Creek Station (Figure 1):

- Class III Residual Waste Landfill (Landfill);
- Boiler Slag Pond (BSP); and
- South Fly Ash Pond (SFAP).

A discussion of the status of the groundwater monitoring program for each CCR unit is presented in the following sections of this report.

## **3.0 CLASS III RESIDUAL WASTE LANDFILL**

The Landfill is a residual solid waste landfill located approximately one-half mile south of the intersection of Little Kyger Creek Road and Shaver Road in Addison Township, Gallia County, Ohio (Figure 1). The Landfill is bordered on the east by Shaver Road, and on the west, north and south by vacant, forested land owned by OVEC. The proposed permitted footprint of the Landfill occupies approximately 98 acres and is capable of managing approximately 20.4 million cubic yards (approximately 4,000 tons per day) of Class III residual waste generated by the coal-powered Kyger Creek Station located approximately two (2) miles southeast of the Landfill.

### **3.1 Groundwater Monitoring Network**

As detailed in the Monitoring Well Installation Report (Applied Geology and Environmental Science, Inc. [AGES] 2016), the CCR groundwater monitoring network for the Landfill consists of the following 11 wells:

- BuSW-1 (Downgradient);
- BuSW-2 (Upgradient);
- BuSW-3 (Variable);
- BuSW-4 (Downgradient);
- BuSW-5a (Upgradient);
- BuSW-8 (Upgradient);
- BuSW-10 (Downgradient);
- MW-3D (Upgradient);
- IMW-2Bu (Upgradient);
- MW-4D (Upgradient); and
- CCR-2Bu (Downgradient).

The locations of all of the wells in the groundwater monitoring network are shown on Figure 2. As listed above and shown on Table 3-1, the CCR groundwater monitoring network for the Landfill includes six (6) upgradient monitoring wells and four (4) downgradient monitoring wells, and one (1) variable monitoring well, which satisfies the requirements of the CCR Rule. Prior to the March 2025 sampling event, wells CCR-1Bu and IMW-1Bu were abandoned due to a Landfill expansion project and, once construction is complete, the wells will be replaced.

Groundwater levels measured in 2025 are included in Table A-1 of Appendix A. Groundwater flow maps for the two (2) monitoring events completed in 2025 are included in Appendix B.

### **3.2 Groundwater Sampling**

In accordance with §257.94 of the CCR Rule, OVEC completed two (2) rounds of groundwater monitoring in 2025 in accordance with the requirements of the Detection Monitoring Program at

the Landfill. The 15<sup>th</sup> round of Detection Monitoring samples was collected in March/April 2025, and the 16<sup>th</sup> round of Detection Monitoring groundwater samples was collected in October 2025. In accordance with §257.90(e)(3), Table 3-2 presents a sampling summary including the dates the groundwater samples were collected and whether the sample was required by the Detection Monitoring program. Table 3-3 summarizes the measurements of field parameters collected at the completion of purging, immediately prior to collection of each sample. All samples were collected in accordance with the Groundwater Monitoring Program Plan (GMPP) (AGES 2024) and shipped to an analytical laboratory to be analyzed for all of the constituents listed in Appendix III of the CCR Rule (Appendix C).

### **3.3 Analytical Results**

Upon receipt of the March/April and October 2025 analytical results, the groundwater monitoring data were statistically evaluated in accordance with §257.93(h) of the CCR Rule and the Kyger Creek Station CCR Statistical Analysis Plan (StAP) (Stantec Consulting Services Inc. [Stantec] 2021). Appendix D summarizes the analytical results for groundwater samples collected in 2025. No potential SSIs were identified during the March/April and October 2025 Detection Monitoring Events. Therefore, the Landfill will remain in Detection Monitoring.

## **4.0 BOILER SLAG POND**

The BSP is located at the south end of the Kyger Creek Station and is approximately 31 acres in size (Figure 3). The BSP was built in 1955 to serve as a process and disposal area for the coal combustion waste products generated at the station. All flow into the BSP was terminated in July 2023 as part of ongoing construction. Overflow from the BSP had been carried into a reinforced concrete intake structure at the south end of the Boiler Slag Complex. Water entering the intake structure was previously discharged into the Clearwater Pond. The Clearwater Pond was built in 1980, is approximately nine (9) acres in size, and is located to the southwest end of the BSP. The Clearwater Pond is not a CCR unit and monitoring is not required. The unit is currently undergoing closure by removal activities.

In 2019, OVEC conducted additional groundwater sampling to characterize the nature and extent of the release and an Assessment of Corrective Measures (ACM) in accordance with §257.95(g). As part of this assessment, in April 2019, three (3) additional wells (KC-19-27, KC-19-28, and KC-19-29) were installed in the uppermost aquifer at the property boundary downgradient from the BSP (Figure 3). Details regarding the installation of these wells and potential corrective measures are included in the ACM Report for the BSP (AGES 2020a). All details regarding the monitoring and corrective action associated with this unit in 2019 are provided in the 2019 Groundwater Monitoring and Corrective Action Report, Revision 1.0 (AGES 2020b).

#### 4.1 Groundwater Monitoring Network

As detailed in the Monitoring Well Installation Report (AGES 2016) and 2019 Groundwater Monitoring and Corrective Action Report, Revision 1.0 (AGES 2020b), the CCR groundwater monitoring network for the BSP consists of the following 11 wells:

- KC-15-01 (Upgradient);
- KC-15-02 (Upgradient);
- KC-15-03 (Upgradient);
- KC-15-04 (Downgradient);
- KC-15-05 (Downgradient);
- KC-15-06 (Downgradient);
- KC-15-07 (Downgradient);
- KC-15-08 (Downgradient);
- KC-19-27 (Downgradient/Boundary);
- KC-19-28 (Downgradient/Boundary); and
- KC-19-29 (Downgradient/Boundary).

The locations of all the wells in the groundwater monitoring network are shown on Figure 3. As listed above and shown on Table 4-1, the CCR groundwater monitoring network for the BSP includes three (3) upgradient wells and five (5) downgradient wells, which satisfies the requirements of the CCR Rule. Three (3) wells (KC-19-27, KC-19-28, and KC-19-29) are located at the property boundary downgradient from the BSP.

At the time of the March 2022 sampling event, the sample team determined that well KC-15-05 had been destroyed. The well could not be sampled, and a replacement well (KC-15-05a) was installed in August 2022. Well KC-15-05a was installed approximately 10 feet north of original well KC-15-05 at the same depth and with the same construction as the original well. During the October 2022 sampling event, well KC-15-05a could not be safely accessed due to ongoing site construction activities. This replacement well has been sampled during ongoing events; the results of the sampling are being used to evaluate whether the well KC-15-05a is a representative replacement for original well KC-15-05.

Groundwater levels measured in 2025 are included in Table A-2 of Appendix A. Groundwater flow maps for the two (2) monitoring events completed 2025 are included in Appendix B.

Groundwater in the BSP flows from the northwest to the south and southeast toward the Ohio River. Because the BSP is located adjacent to the Ohio River, during periods when the water level in the Ohio River rises significantly and flooding occurs, groundwater flow in the uppermost aquifer may temporarily reverse and groundwater will flow toward the north and west beneath the BSP.

## 4.2 Groundwater Sampling

In accordance with §257.95 of the CCR Rule, the 14<sup>th</sup> and 15<sup>th</sup> rounds of Assessment Monitoring were conducted in March/April and October 2025, respectively.

All samples were collected in accordance with the GMPP (AGES 2024) and analyzed for all Appendix III and Appendix IV constituents, which are listed in Appendix C. In accordance with §257.90(e)(3), Table 4-2 presents a sampling summary, including the dates the groundwater samples were collected and whether the sample was required by the Assessment Monitoring program. Table 4-3 summarizes the measurements of field parameters collected at the completion of purging, immediately prior to collection of each sample. All samples were shipped to an analytical laboratory to be analyzed.

## 4.3 Analytical Results

### 4.3.1 Analytical Results-Appendix III Constituents

Upon receipt, the groundwater monitoring data were statistically evaluated in accordance with §257.93(h) of the CCR Rule and the Kyger Creek Station CCR StAP (Stantec 2021). Appendix D summarizes the analytical results for groundwater samples collected in 2025.

The statistical evaluation of the data identified potential SSIs of one (1) or more Appendix III constituents in wells KC-15-04, KC-15-07, and KC-15-08 (Table 4-4). In accordance with the StAP, OVEC resampled the wells for those constituents with potential SSIs. During the July 2025 resampling event, well KC-15-04 was unable to be located. Given this information, the SSIs were confirmed. The following Appendix III SSIs were confirmed during resampling at the BSP (Table 4-4):

#### **March/April 2025 Assessment Monitoring Event Appendix III SSIs**

- KC-15-04: Sulfate and TDS;
- KC-15-07: Chloride and TDS; and
- KC-15-08: Calcium, Sulfate, and TDS.

#### **October 2025 Assessment Monitoring Event Appendix III SSIs**

- KC-15-04: Fluoride; and
- KC-15-08: Boron, Calcium, Sulfate, and TDS.

### 4.3.2 Analytical Results-Appendix IV Constituents

Based on previous detections of Appendix IV constituents in groundwater at the BSP, OVEC established a Groundwater Protection Standard (GWPS) for each detected Appendix IV constituent in accordance with the §257.95(h)(1) through §257.95(h)(3) as follows:

(1) For constituents for which the U.S. EPA has established a Maximum Contaminant Level (MCL), the GWPS shall be the MCL for that constituent.

(2) On July 30, 2018, the U.S. EPA published alternate limits to be used for several constituents that did not have previously established MCLs to be used as the GWPS for those constituents.

(3) For constituents for which the background level is higher than the MCL or the alternate limit, the background concentration shall be the GWPS for that constituent.

Table 4-5 presents the list of GWPSs for the Assessment Monitoring program at the BSP that were developed in accordance with the above requirements.

During the 14<sup>th</sup> (March/April 2025) and 15<sup>th</sup> (October 2025) Assessment Monitoring Events, it was confirmed that Arsenic in well KC-15-07 exceeded the GWPS of 10 micrograms per liter (ug/L) (Table 4-6).

Arsenic concentrations did not exceed the GWPS at the wells located at the property boundary downgradient from the BSP (wells KC-19-27, KC-19-28, and KC-19-29). These results indicate that Arsenic concentrations in the uppermost aquifer exceeding the GWPS are confined to the site and are not reaching the Ohio River.

## 5.0 SOUTH FLY ASH POND

The SFAP is located at the northwest end of the station (Figure 4). The SFAP was built in 1955 to serve as a process and disposal area for the coal combustion waste products generated at the station. This collection pond is approximately 67 acres in size and banked on all sides. The unit is currently undergoing closure in place activities.

### 5.1 Groundwater Monitoring Network

As detailed in the Monitoring Well Installation Report (AGES 2016), the CCR groundwater monitoring network for the SFAP consists of the following 14 wells. The wells, along with revised location designations based on updated groundwater flow directions, are:

- KC-15-09 (Upgradient);
- KC-15-10 (Upgradient);
- KC-15-11 (Upgradient);
- KC-15-12 (Upgradient);
- KC-15-13 (Upgradient);
- KC-15-14 (Upgradient);
- KC-15-15 (Variable);

- KC-15-16 (Variable);
- KC-15-17 (Variable);
- KC-15-18 (Downgradient);
- KC-15-19 (Downgradient);
- KC-15-20 (Downgradient);
- KC-15-21 (Downgradient); and
- KC-15-22 (Downgradient).

The locations of the monitoring wells are shown on Figure 4. As listed above and shown on Table 5-1, the CCR groundwater monitoring network for the SFAP includes six (6) upgradient and five (5) downgradient wells, which satisfies the requirements of the CCR Rule.

At the time of the June 2022 resampling event, the sample team determined that well KC-15-19 had been destroyed. The well could not be sampled, and a replacement well (KC-15-19a) was installed in August 2022. Well KC-15-19a was installed approximately 10 feet north of the original well KC-15-19 at the same depth and with the same construction as the original well. Replacement well KC-15-19a was sampled in October 2022, March/April and September/October 2023, March/April and September/October 2024, and March/April and October 2025. Results from the sampling event have not yet indicated that KC-15-19a is a representative replacement for KC-15-19, and the facility currently is evaluating whether the sampling results are the result of an error in accordance with 40 C.F.R. § 257.95(g)(3)(ii). The analytical results for well KC-15-19a are included in Appendix D.

As noted in the 2017 Annual Groundwater Monitoring and Corrective Action Report, due to fluctuations in the stage of the nearby Ohio River, well KC-15-17 was located upgradient of the northeast portion of the SFAP during five (5) of the nine (9) monitoring events conducted from October 2015 through September 2017 (prior to the Detection Monitoring period at the unit). Well KC-15-17 was downgradient of the area during three (3) events and sidegradient during one (1) event. Well KC-15-15 was located upgradient of the northeast portion of the SFAP during three (3) of the nine (9) events, downgradient of the area during five (5) events, and sidegradient during one (1) event. Because of this high degree of variability in flow direction, wells KC-15-15 and KC-15-17 (and well KC-15-16 which is located between the wells) could not be designated as either upgradient or downgradient. These wells are therefore not included in the statistical evaluations for the SFAP.

Groundwater levels measured during 2025 are included in Table A-3 of Appendix A. Groundwater flow maps for the two (2) monitoring events completed in 2025 are included in Appendix B. Based on the groundwater level measurements, groundwater in the central portion of the SFAP flows generally from the north/northwest to the south/southeast toward the Ohio River. However, due to the close proximity of the SFAP to the Ohio River, changes in the stage of the river have a significant impact on the direction of groundwater flow at the unit. However, during periods when the stage of the Ohio River rises, groundwater flow in the uppermost aquifer reverses direction

and flows toward the north/northwest. When the Ohio River stage lowers, groundwater levels also begin to lower and return to a more typical flow pattern. With these fluctuations in groundwater levels, the assignment of the upgradient and downgradient well designations above may fluctuate as well.

## **5.2 Groundwater Sampling**

In accordance with §257.95 of the CCR Rule, the 14<sup>th</sup> and 15<sup>th</sup> rounds of Assessment Monitoring were conducted in March/April and October 2025, respectively.

All samples were collected in accordance with the GMPP (AGES 2024) and analyzed for all Appendix III and Appendix IV constituents, which are listed in Appendix C. In accordance with §257.90(e)(3), Table 5-2 presents a sampling summary, including the dates the groundwater samples were collected and whether the sample was required by the Assessment Monitoring program. Table 5-3 summarizes the measurements of field parameters collected at the completion of purging, immediately prior to collection of each sample. All samples were shipped to an analytical laboratory to be analyzed.

During the October 2025 Assessment Monitoring sampling event, well KC-15-13 was found to be broken and well KC-15-14 could not be located. Neither well was sampled during the October 2025 Assessment Monitoring sampling event.

## **5.3 Analytical Results**

### **5.3.1 Analytical Results-Appendix III Constituents**

Upon receipt, the groundwater monitoring data were statistically evaluated in accordance with §257.93(h) of the CCR Rule and the Kyger Creek Station CCR StAP (Stantec 2021). Appendix D summarizes the analytical results for groundwater samples collected in 2024. The statistical evaluation identified potential SSIs of one (1) or more Appendix III constituents in monitoring wells KC-15-18, KC-15-20, and KC-15-21 at the SFAP. In accordance with the StAP, OVEC resampled the wells for those constituents with potential SSIs. Based on the results, the following Appendix III SSIs were confirmed during resampling at the SFAP (Table 5-4):

#### **March/April 2025 Assessment Monitoring Event Appendix III SSIs**

- KC-15-18: Calcium, Chloride, and TDS;
- KC-15-20: Calcium; and
- KC-15-21: Calcium.

#### **October 2025 Assessment Monitoring Event Appendix III SSIs**

- KC-15-18: Calcium, Chloride, Sulfate, and TDS;
- KC-15-20: Calcium; and

- KC-15-21: Calcium.

### 5.3.2 Analytical Results-Appendix IV Constituents

Table 5-5 presents the list of GWPSs for the Assessment Monitoring program at the SFAP that were developed in accordance with the requirements listed in Section 4.3.2. All Appendix IV results were compared to the GWPSs. There were no GWPS exceedances during the March/April or October 2025 Assessment Monitoring Events for any well included in the approved monitoring program.

## 6.0 PROBLEMS ENCOUNTERED

During the July 2025 resampling event, BSP well KC-15-04 was unable to be located and sampled. Given this information, the potential Sulfate and TDS SSIs were confirmed. During the October 2025 sampling event, SFAP well KC-15-13 was found to be broken and well KC-15-14 was unable to be located. Given this information, neither well was sampled during the October 2025 sampling event.

## 7.0 PROJECTED ACTIVITIES FOR 2026

The Landfill will remain in Detection Monitoring and continue to be sampled on a semi-annual basis.

The BSP will remain in Assessment Monitoring and continue to be sampled on a semi-annual basis. As described above, an ACM has been completed for this unit and the process of the selection of remedy for the BSP will continue in 2026.

The SFAP will remain in Assessment Monitoring and continue to be sampled on a semi-annual basis.

Replacement wells KC-15-05a and KC-15-19a will be sampled during future events; the results of the sampling will be used to evaluate whether the wells are representative replacements for the respective original wells.

## 8.0 REFERENCES

Applied Geology and Environmental Science, Inc. (AGES) 2024. Coal Combustion Residuals Regulation Groundwater Monitoring Program Plan, Ohio Valley Electric Corporation, Kyger Creek Station, Cheshire, Gallia County, Ohio, Revision 1.0. January 2024.

Applied Geology and Environmental Science, Inc. (AGES) 2020a. Coal Combustion Residuals Regulation Assessment of Corrective Measures Report Boiler Slag Pond, Ohio Valley Electric Corporation, Kyger Creek Station, Cheshire, Gallia County, Ohio. Revision 1.0. November 2020.

Applied Geology and Environmental Science, Inc. (AGES) 2020b. Coal Combustion Residuals Regulation 2019 Groundwater Monitoring and Corrective Action Report, Ohio Valley Electric Corporation, Kyger Creek Station, Cheshire, Gallia County, Ohio. Revision 1.0. October 2020.

Applied Geology and Environmental Science, Inc. (AGES) 2016. Coal Combustion Residuals Regulation Monitoring Well Installation Report, Ohio Valley Electric Corporation, Kyger Creek Station, Cheshire, Gallia County, Ohio. August 2016.

Stantec Consulting Services Inc. (Stantec) 2021. Coal Combustion Residuals Regulation Statistical Analysis Plan, Ohio Valley Electric Corporation, Kyger Creek Station, Cheshire, Gallia County, Ohio. July 2021.

## **TABLES**

**TABLE 3-1**  
**GROUNDWATER MONITORING NETWORK**  
**CLASS III RESIDUAL WASTE LANDFILL**  
**CCR GROUNDWATER MONITORING PROGAM**  
**KYGER CREEK STATION**  
**CHESHIRE, OHIO**

Monitoring Well ID	Designation	Date of Installation	Coordinates		Ground Elevation (ft) <sup>2</sup>	Top of Casing Elevation (ft) <sup>2</sup>	Top of Screen Elevation (ft)	Base of Screen Elevation (ft)	Total Depth From Top of Casing (ft)
			Northing	Easting					
<b>CCR Unit Boundary Wells</b>									
<b>BuSW-1</b>	Downgradient	6/20/2006	335756.52	2063859.43	781.46	784.21	521.21	508.10	276.11
<b>BuSW-2</b>	Upgradient	--	336285.22	2062985.02	792.19	794.98	526.69	506.69	288.56
<b>BuSW-3</b>	Variable	9/13/2007	336746.19	2062430.81	787.57	790.01	529.57	504.57	283.56
<b>BuSW-4</b>	Downgradient	5/17/2006	337738.57	2062566.35	780.99	783.46	535.76	525.76	257.70
<b>BuSW-5</b>	Upgradient	8/2/2007 (Repaired 4/4/2023)	338123.59	2063553.15	779.58	782.28	542.06	502.06	281.12
<b>CCR-2Bu</b>	Downgradient	10/21/2015	336302.19	2064286.87	742.28	744.69	514.78	494.78	249.91
<b>Supplemental CCR Wells</b>									
<b>BuSW-8</b>	Upgradient	4/17/2006	337692.04	2065706.88	630.59	633.48	498.12	498.12	145.36
<b>BuSW-10</b>	Downgradient	6/29/2007	336364.75	2065495.79	617.26	619.76	513.85	498.85	120.91
<b>IMW-2Bu</b>	Upgradient	9/10/2007	337417.23	2065170.91	609.77	612.44	508.96	493.96	118.48
<b>MW-3D</b>	Upgradient	5/1/2006	338184.68	2065077.38	741.11	743.53	515.58	505.58	237.95
<b>MW-4D</b>	Upgradient	5/10/2006	336365.51	2066044.36	576.87	579.51	504.94	494.94	84.57

Notes:

1. The well locations are referenced to the Ohio State Plane South, North American Datum (NAD83), east zone coordinate system.

2. Elevations are referenced to the North American Vertical Datum (NAVD) 1988.

**TABLE 3-2**  
**SAMPLES COLLECTED DURING 2025**  
**CLASS III RESIDUAL WASTE LANDFILL**  
**CCR GROUNDWATER MONITORING PROGAM**  
**KYGER CREEK STATION**  
**CHESHIRE, OHIO**

Well ID	Designation	Mar/Apr-25	Oct-25
<b>BuSW-1</b>	Downgradient	DM	DM
<b>BuSW-2</b>	Upgradient	DM	DM
<b>BuSW-3</b>	Variable	DM	DM
<b>BuSW-4</b>	Downgradient	DM	DM
<b>BuSW-5</b>	Upgradient	DM	DM
<b>BuSW-8</b>	Upgradient	DM	DM
<b>BuSW-10</b>	Downgradient	DM	DM
<b>IMW-2Bu</b>	Upgradient	DM	DM
<b>CCR-2Bu</b>	Downgradient	DM	DM
<b>MW-3D</b>	Upgradient	DM	DM
<b>MW-4D</b>	Upgradient	DM	DM

Notes:

1. DM: Detection Monitoring.

**TABLE 3-3**  
**SUMMARY OF MEASURED FIELD PARAMETERS DURING 2025**  
**CLASS III RESIDUAL WASTE LANDFILL**  
**CCR GROUNDWATER MONITORING PROGAM**  
**KYGER CREEK STATION**  
**CHESHIRE, OHIO**

Sample ID	Date	Temperature (°C)	Conductivity (μohms/cm)	pH (S.U.)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTUs)
<b>BuSW-1</b>	Mar-25	14.25	6390	7.51	213	4.59	4.48
<b>BuSW-2</b>	Apr-25	11.19	11900	7.05	-45	4.38	3.58
<b>BuSW-3</b>	Apr-25	10.70	46000	7.66	-15	1.47	4.01
<b>BuSW-4</b>	Apr-25	10.36	36500	7.14	26	5.61	12.3
<b>BuSW-5</b>	Apr-25	11.78	1370	7.00	-50	2.87	3.68
<b>BuSW-8</b>	Apr-25	11.72	840	6.99	-12	1.52	3.01
<b>BuSW-10</b>	Apr-25	12.46	1130	7.10	104	0.88	3.58
<b>IMW-2Bu</b>	Apr-25	11.24	989	7.22	132	1.12	2.65
<b>MW-3D</b>	Apr-25	15.13	2720	7.44	-57	2.64	1.82
<b>MW-4D</b>	Apr-25	10.87	1000	7.14	77	3.31	2.91
<b>CCR-2Bu</b>	Mar-25	14.37	7540	7.05	8	2.6	3.87
<b>BuSW-1</b>	Oct-25	17.53	1130	7.07	427	0.85	0.06
<b>BuSW-2</b>	Oct-25	15.87	1140	7.03	263	0.57	2.68
<b>BuSW-3</b>	Oct-25	15.71	1050	7.11	673	1.02	4.62
<b>BuSW-4</b>	Oct-25	16.32	1180	7.03	187	2.41	16.3
<b>BuSW-5</b>	Oct-25	16.71	1060	7.13	281	0.81	3.58
<b>BuSW-8</b>	Oct-25	15.88	1050	7.16	329	0.81	4.00
<b>BuSW-10</b>	Oct-25	15.51	1020	7	439	1.38	2.75
<b>IMW-2Bu</b>	Oct-25	15.61	1040	7.06	649	1.19	3.58
<b>MW-3D</b>	Oct-25	16.35	1420	6.94	254	1.24	4.78
<b>MW-4D</b>	Oct-25	16.06	1170	7.17	495	1.77	2.70
<b>CCR-2Bu</b>	Oct-25	17.54	1090	7.16	125	1.47	3.58

Notes:

1. °C: Degrees Celsius.
2. μohms/cm: Micro-ohms per centimeter.
3. S.U.: Standard Units.
4. mV: Millivolts.
5. mg/L: Milligrams per liter.
6. NTUs: Nephelometric Turbidity Units.

**TABLE 4-1**  
**GROUNDWATER MONITORING NETWORK**  
**BOILER SLAG POND**  
**CCR GROUNDWATER MONITORING PROGRAM**  
**KYGER CREEK STATION**  
**CHESHIRE, OHIO**

Monitoring Well ID	Designation	Date of Installation	Coordinates		Ground Elevation (ft) <sup>2</sup>	Top of Casing Elevation (ft) <sup>2</sup>	Top of Screen Elevation (ft)	Base of Screen Elevation (ft)	Total Depth From Top of Casing (ft)
			Northing	Easting					
KC-15-01	Upgradient	8/5/2015 (Modified 4/5/2023)	332114.55	2072393.84	573.81	576.42	519.77	509.77	69.43
KC-15-02	Upgradient	8/7/2012 (Modified 4/5/2023)	332500.654	2072569.222	574.17	576.68	520.79	510.79	69.46
KC-15-03	Upgradient	8/12/2015 (Modified 4/5/2023)	332546.402	2073001.342	573.91	576.76	520.03	510.03	71.52
KC-15-04	Downgradient	8/12/2015	331782.439	2073755.607	579.89	579.37	519.89	509.89	69.48
KC-15-05	Downgradient	8/19/2015	331569.994	2073574.832	580.52	580.07	520.52	510.52	69.55
KC-15-06	Downgradient	8/18/2015	331218.52	2073210.42	579.98	579.48	519.98	509.98	69.50
KC-15-07	Downgradient	8/11/2015	331291.75	2072957.79	578.54	578.04	508.54	498.54	79.50
KC-15-08	Downgradient	8/10/2015	331460.59	2072675.87	579.41	578.75	509.41	499.41	79.34
KC-19-27	Downgradient/ Boundary	4/5/2019	331507.38	2073611.94	558.22	561.13	530.22	520.22	38.00
KC-19-28	Downgradient/ Boundary	4/4/2019	331064.43	2073270.03	558.41	561.10	526.41	516.41	42.00
KC-19-29	Downgradient/ Boundary	4/3/2019	330558.94	2072840.95	561.13	564.17	530.13	520.13	41.00

Notes:

1. The well locations are referenced to the Ohio State Plane South, North American Datum (NAD83), east zone coordinate system.
2. Elevations are referenced to the North American Vertical Datum (NAVD) 1988.
3. Well KC-15-05 was destroyed; Well KC-15-05a is currently being evaluated to determine if it is representative of the original well.

**TABLE 4-2**  
**SAMPLES COLLECTED DURING 2025**  
**BOILER SLAG POND**  
**CCR GROUNDWATER MONITORING PROGRAM**  
**KYGER CREEK STATION**  
**CHESHIRE, OHIO**

Well ID	Designation	Mar/Apr-25	Jul-25	Oct-25	Dec-25
<b>KC-15-01</b>	Upgradient	AM	NS	AM	NS
<b>KC-15-02</b>	Upgradient	AM	NS	AM	NS
<b>KC-15-03</b>	Upgradient	AM	NS	AM	NS
<b>KC-15-04</b>	Downgradient	AM	NS	AM	AM
<b>KC-15-05a</b>	Downgradient	AM	NS	AM	AM
<b>KC-15-06</b>	Downgradient	AM	NS	AM	AM
<b>KC-15-07</b>	Downgradient	AM	AM	AM	AM
<b>KC-15-08</b>	Downgradient	AM	AM	AM	AM
<b>KC-19-27</b>	Downgradient	AM	NS	AM	AM
<b>KC-19-28</b>	Downgradient	AM	NS	AM	NS
<b>KC-19-29</b>	Downgradient	AM	NS	AM	NS

Notes:

1. AM: Assessment Monitoring.
2. NS: Not Sampled.
3. Well KC-15-05a was sampled and is being evaluated to determine if it is representative of the original well.

**TABLE 4-3**  
**SUMMARY OF MEASURED FIELD PARAMETERS DURING 2025**  
**BOILER SLAG POND**  
**CCR GROUNDWATER MONITORING PROGRAM**  
**KYGER CREEK STATION**  
**CHESHIRE, OHIO**

Sample ID	Date	Temperature (°C)	Conductivity (μohms/cm)	pH (S.U.)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTUs)
KC-15-01	Apr-25	12.15	691	6.93	120	0.85	3.95
KC-15-02	Apr-25	13.01	982	6.25	152	5.95	4.60
KC-15-03	Mar-25	12.17	866	7.11	126	0.97	4.31
KC-15-04	Apr-25	13.40	792	6.33	141	0.75	4.08
KC-15-05a	Apr-25	14.23	872	7.28	70	0.46	3.97
KC-15-06	Apr-25	14.12	750	6.59	87	0.76	4.68
KC-15-07	Apr-25	16.18	920	6.70	-100	0.42	4.33
KC-15-08	Apr-25	18.90	1250	6.19	-32	0.00	4.39
KC-19-27	Apr-25	12.48	1660	7.15	21	0.61	4.62
KC-19-28	Apr-25	12.85	1680	7.34	45	1.52	1.86
KC-19-29	Apr-25	13.20	1470	7.08	210	1.01	3.25
KC-15-07	Jul-25	23.96	874	6.40	160	7.66	4.84
KC-15-08	Jul-25	26.62	1640	6.51	195	8.10	17.2
KC-15-01	Oct-25	17.54	752	6.05	325	3.22	2.70
KC-15-02	Oct-25	18.15	877	6.31	213	3.12	4.88
KC-15-03	Oct-25	20.18	852	6.27	358	4.95	11.15
KC-15-04	Oct-25	17.20	1140	6.02	-53	0.31	4.29
KC-15-05a	Oct-25	20.25	1310	6.03	11	0.23	3.78
KC-15-06	Oct-25	17.04	1180	6.28	-40	0.33	4.28
KC-15-07	Oct-25	21.09	1300	6.35	-155	0.24	3.75
KC-15-08	Oct-25	19.65	2230	6.42	-109	0.50	4.85
KC-19-27	Oct-25	27.74	2090	6.00	-122	0.17	4.20
KC-19-28	Oct-25	8.53	481	5.71	130	0.70	4.09
KC-19-29	Oct-25	15.72	787	5.52	441	0.00	32.7
KC-15-04	Dec-25	15.65	733	6.20	67	4.25	8.50
KC-15-05a	Dec-25	14.95	902	6.35	64	2.10	8.93
KC-15-06	Dec-25	14.81	839	6.42	-11	0.66	9.18
KC-15-07	Dec-25	12.45	832	6.48	-91	1.85	9.01
KC-15-08	Dec-25	13.48	1580	6.71	-88	0.64	3.04
KC-19-27	Dec-25	14.12	2280	6.52	-112	0.46	3.34

Notes:

- 1. °C: Degrees Celsius.
- 2. μohms/cm: Micro-ohms per centimeter.
- 3. S.U.: Standard Units.
- 4. mV: Millivolts.
- 5. mg/L: Milligrams per liter.
- 6. NTUs: Nephelometric Turbidity Units.
- 7. Well KC-15-05a was sampled and is being evaluated to determine if it is representative of the original well.

**TABLE 4-4**  
**SUMMARY OF POTENTIAL AND CONFIRMED APPENDIX III SSIs**  
**BOILER SLAG POND**  
**CCR GROUNDWATER MONITORING PROGAM**  
**KYGER CREEK STATION**  
**CHESHIRE, OHIO**

Well ID	Potential SSI Parameter (Units)	14th Assessment Monitoring Sampling Event March/April 2025		14th Assessment Monitoring Resampling Event July 2025		15th Assessment Monitoring Sampling Event October 2025		15th Assessment Monitoring Resampling Event December 2025	
		Potential SSI Result	UTL	Potential SSI Result	Confirmed SSI (Yes/No)	Potential SSI Result	UTL	Potential SSI Result	Confirmed SSI (Yes/No)
KC-15-04	Fluoride (mg/L)	NA	NA	NA	NA	0.24	0.18	0.25 U	Yes
	Sulfate (mg/L)	310	304	NS	Yes	NA	NA	NA	NA
	TDS (mg/L)	630	592	NS	Yes	NA	NA	NA	NA
KC-15-07	Chloride (mg/L)	41	39	40	Yes	NA	NA	NA	NA
	TDS (mg/L)	650	592	600	Yes	610	593	430	No
KC-15-08	Boron (mg/L)	NA	NA	NA	NA	1.1	0.76	0.99	Yes
	Calcium (mg/L)	160	137	290	Yes	260	137	250	Yes
	Sulfate (mg/L)	360	304	740	Yes	670	304	640	Yes
	TDS (mg/L)	810	592	1400	Yes	1200	593	1200	Yes

Notes:

1. SSI: Statistically Significant Increase.
2. UTL: Upper Tolerance Limit (Pooled Interwell UTL).
3. mg/L: Milligrams per liter.
4. NA: Not Applicable—no SSI.
5. The detection limit for Fluoride in well KC-15-04 exceeds the UTL of 0.18 mg/L. As a conservative measure, the Fluoride SSI is confirmed.

**TABLE 4-5**  
**GROUNDWATER PROTECTION STANDARDS**  
**BOILER SLAG POND**  
**CCR ASSESSMENT MONITORING PROGRAM**  
**KYGER CREEK STATION**  
**CHESHIRE, OHIO**

Appendix IV Constituents			
Constituent (Units)	Background	MCL/SMCL	GWPS
Antimony, Sb (µg/L)	5	6	6
Arsenic, As (µg/L)	6	10	10
Barium, Ba (µg/L)	135.4	2000	2000
Beryllium, Be (µg/L)	3.5	4	4
Cadmium, Cd (µg/L)	2.5	5	5
Chromium, Cr (µg/L)	3	100	100
Cobalt, Co (µg/L)	9	6*	9
Fluoride, F (mg/L)	0.2	4	4
Lead, Pb (µg/L)	1.0	15*	15
Lithium, Li (µg/L)	0.02	0.04*	0.04
Mercury, Hg (µg/L)	0.5	2	2
Molybdenum, Mo (µg/L)	4.9	100*	100
Radium 226 & 228 (combined) (pCi/L)	5	5	5
Selenium, Se (µg/L)	5	50	50
Thallium, Tl (µg/L)	1.0	2	2

Notes:

1. MCL: Maximum Contaminant Level.
2. SMCL: Secondary Maximum Contaminant Level.
3. \*: Established by U.S. EPA as part of 2018 decision.
4. GWPS: Groundwater Protection Standard.
5. µg/L: Micrograms per liter.
6. mg/L: Milligrams per liter.
7. pCi/L: Picocuries per liter.

**TABLE 4-6**  
**SUMMARY OF POTENTIAL AND CONFIRMED GWPS EXCEEDANCES**  
**BOILER SLAG POND**  
**CCR GROUNDWATER MONITORING PROGRAM**  
**KYGER CREEK STATION**  
**CHESHIRE, OHIO**

Well ID	Potential Exceedance Parameter (Units)	14th Assessment Monitoring Sampling Event March/April 2025		14th Assessment Monitoring Resampling Event July 2025		15th Assessment Monitoring Sampling Event October 2025		15th Assessment Monitoring Resampling Event December 2025	
		Potential Exceedance Result	GWPS	Potential Exceedance Result	Confirmed Exceedance (Yes/No)	Potential Exceedance Result	GWPS	Potential Exceedance Result	Confirmed Exceedance (Yes/No)
KC-15-06	Combined Radium 226/228 (pCi/L)	NA	NA	NA	NA	5.37	5	5 U	No
KC-15-07	Arsenic (ug/L)	76	10	45	Yes	85	10	200	Yes
KC-15-08	Arsenic (ug/L)	NA	NA	NA	NA	12	10	8.5	No
	Cobalt (ug/L)	11	9.1	4.4	No	NA	NA	NA	NA
KC-19-27	Arsenic (ug/L)	NA	NA	NA	NA	12	10	9.4	No

Notes:

1. GWPS: Groundwater Protection Standard.
2. U: Non-detect
3.  $\mu\text{g/L}$ : Micrograms per liter.
4. NA: Not Applicable—no potential exceedance.

**TABLE 5-1**  
**GROUNDWATER MONITORING NETWORK**  
**SOUTH FLY ASH POND**  
**CCR GROUNDWATER MONITORING PROGRAM**  
**KYGER CREEK PLANT**  
**CHESHIRE, OHIO**

Monitoring Well ID	Designation	Date of Installation	Coordinates		Ground Elevation (ft) <sup>2</sup>	Top of Casing Elevation (ft) <sup>2</sup>	Top of Screen Elevation (ft)	Base of Screen Elevation (ft)	Total Depth From Top of Casing (ft)
			Northing	Easting					
<b>KC-15-09</b>	Upgradient	9/15/2015	334631.959	2072494.446	587.85	587.47	516.85	506.85	80.62
<b>KC-15-10</b>	Upgradient	9/16/2015	335018.949	2072695.744	587.75	587.45	523.75	513.75	73.70
<b>KC-15-11</b>	Upgradient	8/20/2015	335426.144	2072970.304	588.07	587.71	524.07	514.07	73.64
<b>KC-15-12</b>	Upgradient	9/17/2015	335867.034	2073268.666	588.40	587.94	524.40	514.40	73.54
<b>KC-15-13</b>	Upgradient	9/1/2015	336047.047	2073665.155	588.23	587.86	521.23	511.23	76.73
<b>KC-15-14</b>	Upgradient	8/20/2015	335808.537	2074057.138	588.85	587.80	524.85	513.85	72.95
<b>KC-15-15</b>	Variable	9/2/2015	335558.54	2074472.666	587.95	587.63	523.95	513.95	73.68
<b>KC-15-16</b>	Variable	9/3/2015	335223.916	2074799.53	588.82	588.38	524.82	514.82	73.50
<b>KC-15-17</b>	Variable	9/3/2015	334881.253	2074480.308	588.68	588.13	524.68	514.68	73.45
<b>KC-15-18</b>	Downgradient	8/25/2015	334507.455	2074126.888	588.27	587.72	524.27	514.27	73.45
<b>KC-15-19</b>	Downgradient	9/9/2015	334132.454	2073771.27	588.47	588.18	524.47	514.47	73.71
<b>KC-15-20</b>	Downgradient	8/27/2015	333841.393	2073452.842	589.45	588.72	525.45	515.45	73.26
<b>KC-15-21</b>	Downgradient	8/27/2015	334089.953	2073009.526	588.28	587.84	518.28	508.28	79.56
<b>KC-15-22</b>	Downgradient	9/10/2015	334307.567	2072647.434	587.51	587.27	518.51	508.51	78.76

Notes:

1. The well locations are referenced to the Ohio State Plane South, North American Datum (NAD83), east zone coordinate system.
2. Elevations are referenced to the North American Vertical Datum (NAVD) 1988.
3. Well KC-15-19 was destroyed; Well KC-15-19a is currently being evaluated to determine if it is representative of the original well.

**TABLE 5-2**  
**SAMPLES COLLECTED DURING 2025**  
**SOUTH FLY ASH POND**  
**CCR GROUNDWATER MONITORING PROGRAM**  
**KYGER CREEK STATION**  
**CHESHIRE, OHIO**

Well ID	Designation	Mar/Apr-25	Jul-25	Oct-25	Dec-25
KC-15-09	Upgradient	AM	NS	AM	NS
KC-15-10	Upgradient	AM	NS	AM	NS
KC-15-11	Upgradient	AM	AM	AM	NS
KC-15-12	Upgradient	AM	AM	AM	NS
KC-15-13	Upgradient	AM	NS	NS	NS
KC-15-14	Upgradient	AM	NS	NS	NS
KC-15-15	Variable	AM	NS	AM	NS
KC-15-16	Variable	AM	NS	AM	NS
KC-15-17	Variable	AM	NS	AM	NS
KC-15-18	Downgradient	AM	AM	AM	AM
KC-15-19a	Downgradient	AM	AM	AM	AM
KC-15-20	Downgradient	AM	AM	AM	AM
KC-15-21	Downgradient	AM	AM	AM	AM
KC-15-22	Downgradient	AM	NS	AM	AM

Notes:

1. AM: Assessment Monitoring.
2. NS: Not Sampled.
3. Well KC-15-19a was sampled and is being evaluated to determine if it is representative of the original well.

**TABLE 5-3**  
**SUMMARY OF MEASURED FIELD PARAMETERS DURING 2025**  
**SOUTH FLY ASH POND**  
**CCR GROUNDWATER MONITORING PROGRAM**  
**KYGER CREEK STATION**  
**CHESHIRE, OH**

Sample ID	Date	Temperature (°C)	Conductivity (μohms/cm)	pH (S.U.)	Oxidation Reduction Potential (mV)	Dissolved Oxygen (mg/L)	Turbidity (NTUs)
<b>KC-15-09</b>	Apr-25	11.97	580	6.15	209	0.00	9.50
<b>KC-15-10</b>	Apr-25	15.09	578	6.19	244	2.31	56.20
<b>KC-15-11</b>	Apr-25	NA	NA	NA	NA	NA	NA
<b>KC-15-12</b>	Apr-25	NA	NA	NA	NA	NA	NA
<b>KC-15-13</b>	Apr-25	17.50	1230	5.51	1	0.00	43.50
<b>KC-15-14</b>	Apr-25	22.25	725	6.04	124	2.27	12.40
<b>KC-15-15</b>	Apr-25	15.90	797	5.49	254	0.00	4.90
<b>KC-15-16</b>	Apr-25	13.53	1990	6.33	225	2.71	237
<b>KC-15-17</b>	Mar-25	14.07	1020	8.93	101	2.90	330
<b>KC-15-18</b>	Mar-25	14.61	1690	6.27	45	0.00	45.90
<b>KC-15-19a</b>	Mar-25	7.80	1350	5.86	89	0.00	11.50
<b>KC-15-20</b>	Mar-25	14.30	1150	6.26	221	0.00	17.00
<b>KC-15-21</b>	Apr-25	12.92	1450	5.87	264	0.00	19.00
<b>KC-15-22</b>	Apr-25	13.06	910	6.29	-102	0.00	4.80
<b>KC-15-11</b>	Jul-25	25.72	462	5.91	302	4.79	4.63
<b>KC-15-12</b>	Jul-25	25.60	608	6.44	324	4.78	4.73
<b>KC-15-18</b>	Jul-25	19.43	1320	6.41	325	5.01	>1000
<b>KC-15-19a</b>	Jul-25	19.39	1050	5.95	283	2.47	4.81
<b>KC-15-20</b>	Jul-25	19.88	1100	6.34	328	2.54	26.90
<b>KC-15-21</b>	Jul-25	19.53	920	6.38	264	7.49	36.40
<b>KC-15-09</b>	Oct-25	19.41	522	6.16	390	0.00	1.02
<b>KC-15-10</b>	Oct-25	16.90	456	5.80	337	0.00	0.96
<b>KC-15-11</b>	Oct-25	18.31	486	5.73	420	0.00	2.10
<b>KC-15-12</b>	Oct-25	16.87	615	6.63	334	3.64	1.49
<b>KC-15-13</b>	Oct-25	NA	NA	NA	NA	NA	NA
<b>KC-15-14</b>	Oct-25	NA	NA	NA	NA	NA	NA
<b>KC-15-15</b>	Oct-25	20.16	744	6.01	205	0.00	1.64
<b>KC-15-16</b>	Oct-25	20.78	1790	5.89	410	3.34	4.70
<b>KC-15-17</b>	Oct-25	18.74	2060	8.08	188	0.00	61.20
<b>KC-15-18</b>	Oct-25	18.50	2210	6.19	22	0.34	4.50
<b>KC-15-19a</b>	Oct-25	15.64	1150	6.04	386	3.19	4.88
<b>KC-15-20</b>	Oct-25	17.31	1290	6.12	402	0.00	4.82
<b>KC-15-21</b>	Oct-25	22.98	924	6.55	313	6.57	14.49
<b>KC-15-22</b>	Oct-25	19.24	628	6.47	245	1.96	1.80
<b>KC-15-18</b>	Dec-25	7.14	1220	6.87	87	0.48	3.95
<b>KC-15-19a</b>	Dec-25	12.68	1140	6.37	126	4.54	8.36
<b>KC-15-20</b>	Dec-25	11.87	1050	6.73	95	0.63	4.32
<b>KC-15-21</b>	Dec-25	9.55	1360	6.90	93	0.47	3.58

Notes:

1. °C: Degrees Celsius.
2. μohms/cm: Micro-ohms per centimeter.
3. S.U.: Standard Units.
4. mV: Millivolts.
5. mg/L: Milligrams per liter.
6. NTUs: Nephelometric Turbidity Units.
7. Well KC-15-19a was sampled and is being evaluated to determine if it is representative of the original well.

**TABLE 5-4**  
**SUMMARY OF POTENTIAL AND CONFIRMED APPENDIX III SSIs**  
**SOUTH FLY ASH POND**  
**CCR GROUNDWATER MONITORING PROGRAM**  
**KYGER CREEK STATION**  
**CHESHIRE, OHIO**

Well ID	Potential SSI Parameter (Units)	14th Assessment Monitoring Sampling Event March/April 2025		14th Assessment Monitoring Resampling Event July 2025		15th Assessment Monitoring Sampling Event October 2025		15th Assessment Monitoring Resampling Event December 2025	
		Potential SSI Result	UTL	Potential SSI Result	Confirmed SSI (Yes/No)	Potential SSI Result	UTL	Potential SSI Result	Confirmed SSI (Yes/No)
KC-15-18	Calcium (mg/L)	200	111	250	Yes	190	114	200	Yes
	Chloride (mg/L)	120	65	94	Yes	140	79	120	Yes
	Sulfate (mg/L)	610	508	500	No	700	508	660	Yes
	TDS (mg/L)	1100	890	1000	Yes	1200	890	1200	Yes
KC-15-20	Calcium (mg/L)	190	111	190	Yes	190	114	190	Yes
	TDS (mg/L)	NA	NA	NA	NA	910	890	890	No
KC-15-21	Calcium (mg/L)	240	111	150	Yes	150	114	120	Yes
	Fluoride (mg/L)	NA	NA	NA	NA	0.29	0.25	0.15 J	No
	Sulfate (mg/L)	540	508	270	No	NA	NA	NA	NA
	TDS (mg/L)	930	890	650	No	NA	NA	NA	NA

Notes:

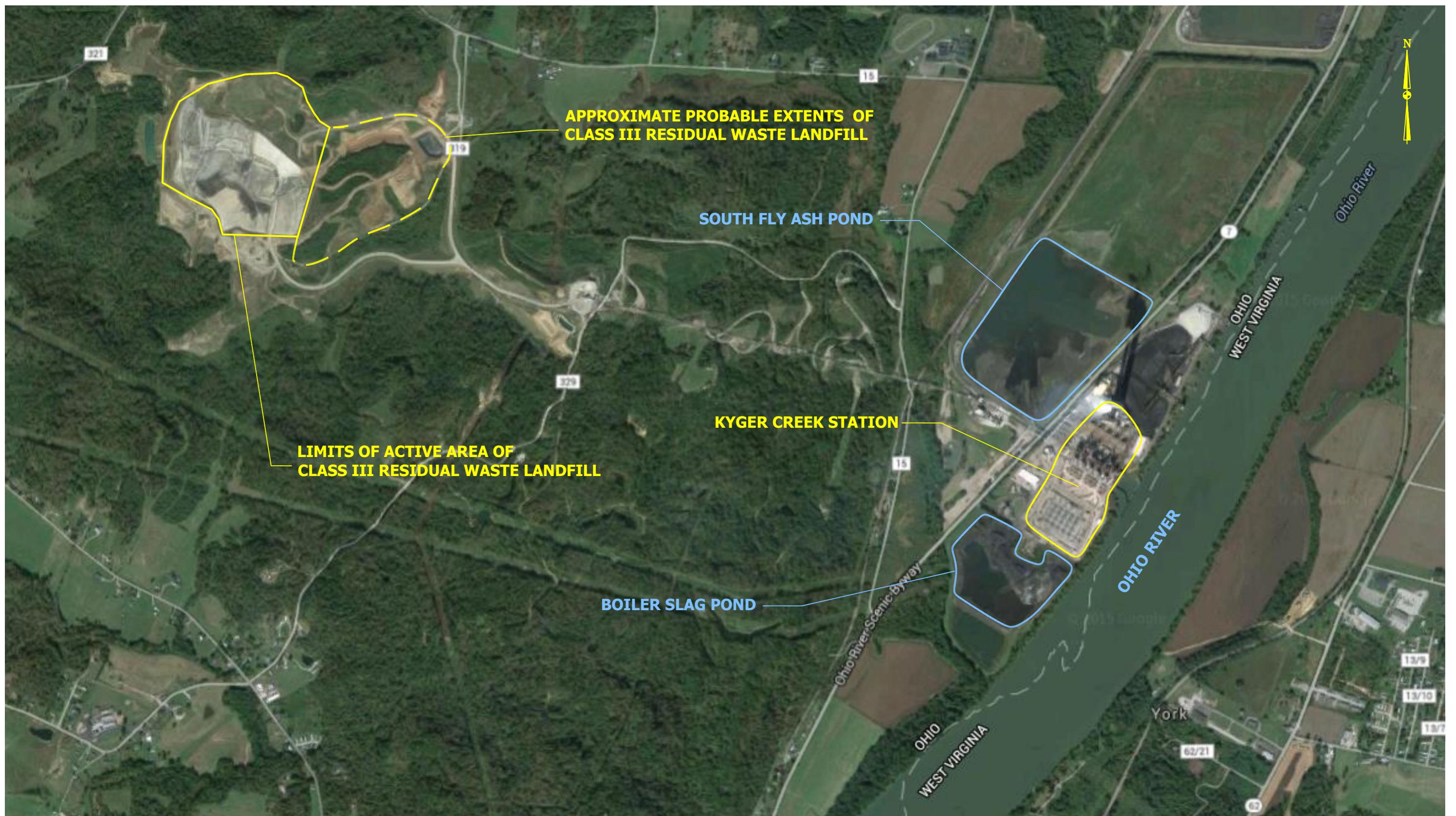
1. SSI: Statistically Significant Increase.
2. UTL: Upper Tolerance Limit (Pooled Interwell UTL).
3. mg/L: Milligrams per liter.
4. NA: Not Applicable.

**TABLE 5-5**  
**GROUNDWATER PROTECTION STANDARDS**  
**SOUTH FLY ASH POND**  
**CCR ASSESSMENT MONITORING PROGRAM**  
**KYGER CREEK STATION**  
**CHESHIRE, OHIO**

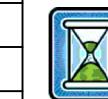
Appendix IV Constituents			
Constituent (Units)	Background	MCL/SMCL	GWPS
Antimony, Sb (µg/L)	2	6	6
Arsenic, As (µg/L)	4.3	10	10
Barium, Ba (µg/L)	179	2000	2000
Beryllium, Be (µg/L)	1.0	4	4
Cadmium, Cd (µg/L)	1.2	5	5
Chromium, Cr (µg/L)	5.3	100	100
Cobalt, Co (µg/L)	17	6*	17
Fluoride, F (mg/L)	0.2	4	4
Lead, Pb (µg/L)	1.8	15*	15
Lithium, Li (µg/L)	0.03	0.04*	0.04
Mercury, Hg (µg/L)	0.5	2	2
Molybdenum, Mo (µg/L)	11.1	100*	100
Radium 226 & 228 (combined) (pCi/L)	5	5	5
Selenium, Se (µg/L)	5	50	50
Thallium, Tl (µg/L)	1	2	2

Notes:

1. MCL: Maximum Contaminant Level.
2. SMCL: Secondary Maximum Contaminant Level.
3. \*: Established by U.S. EPA as part of 2018 decision.
4. GWPS: Groundwater Protection Standard.
5. µg/L: Micrograms per liter.
6. mg/L: Milligrams per liter.
7. pCi/L: Picocuries per liter.



DRAWN BY	JM
DATE	
CHECKED BY	
JOB NO.	2019018-KYG
DWG FILE	KYGER_CCR_2019 Annual GW Rpt_Aerial Site b01.dwg
DRAWING SCALE	NOT TO SCALE



**AGES**

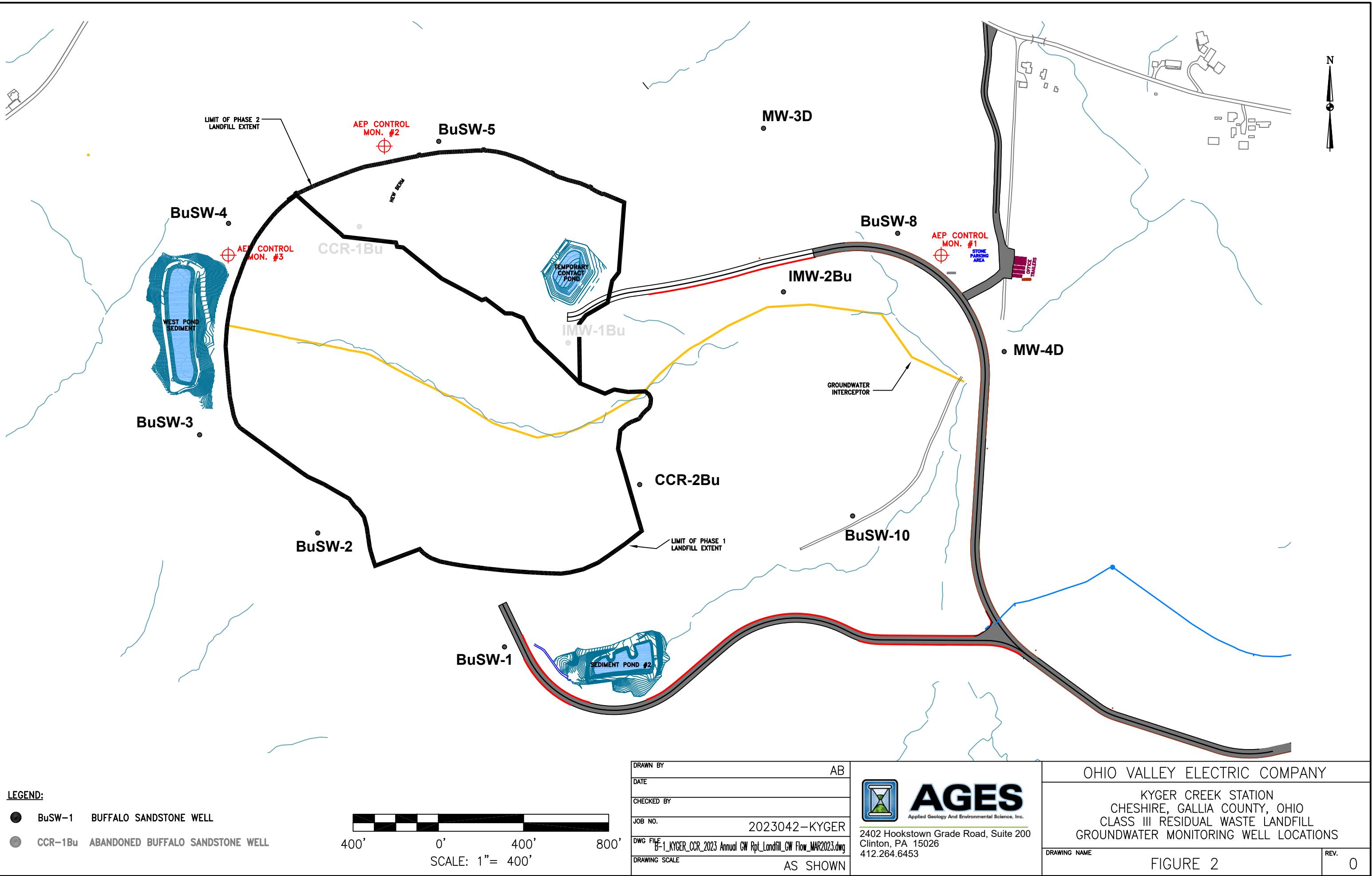
Applied Geology And Environmental Science, Inc.  
2402 Hookstown Grade Road, Suite 200  
Clinton, PA 15026  
412.264.6453

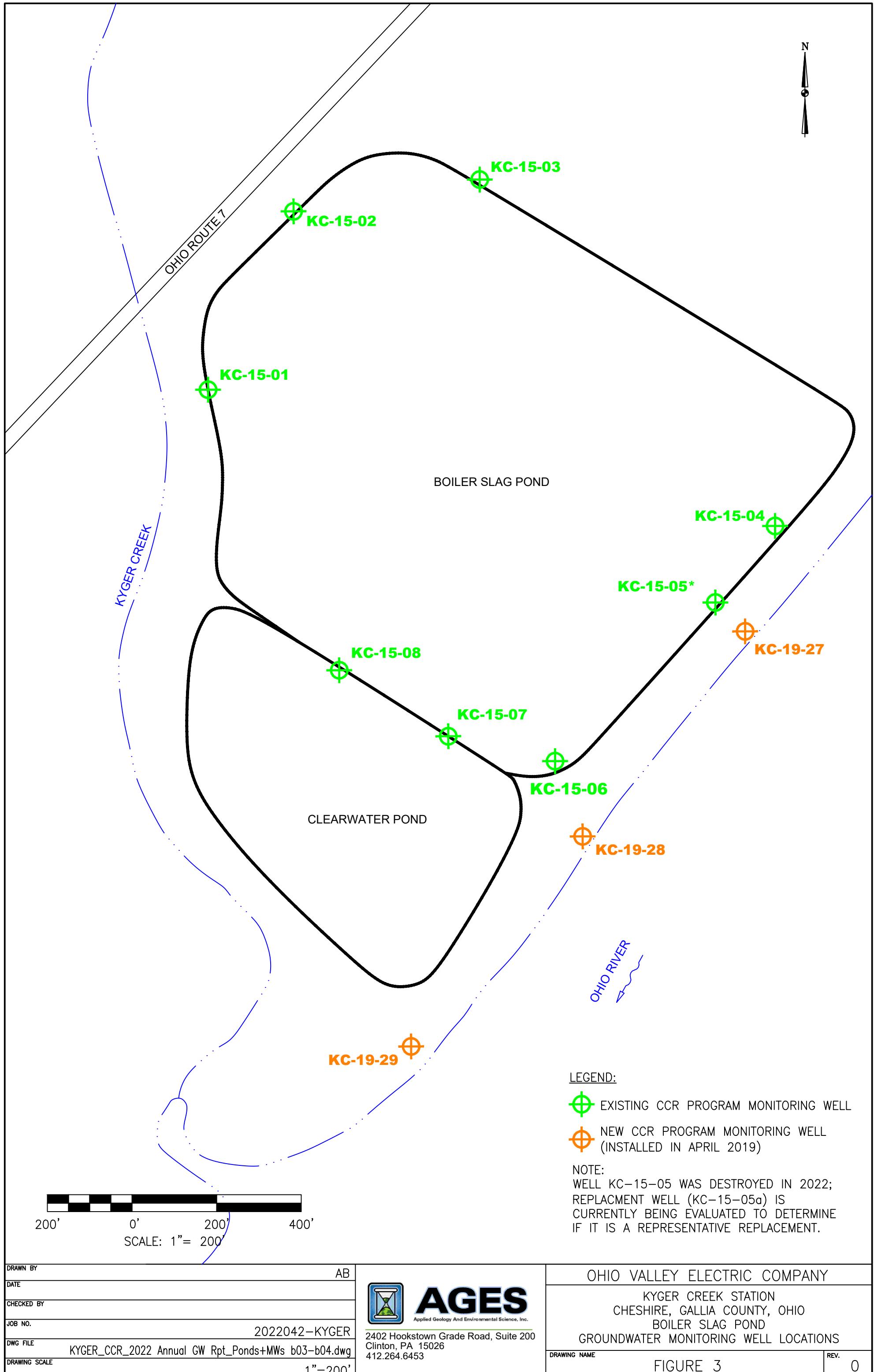
OHIO VALLEY ELECTRIC COMPANY

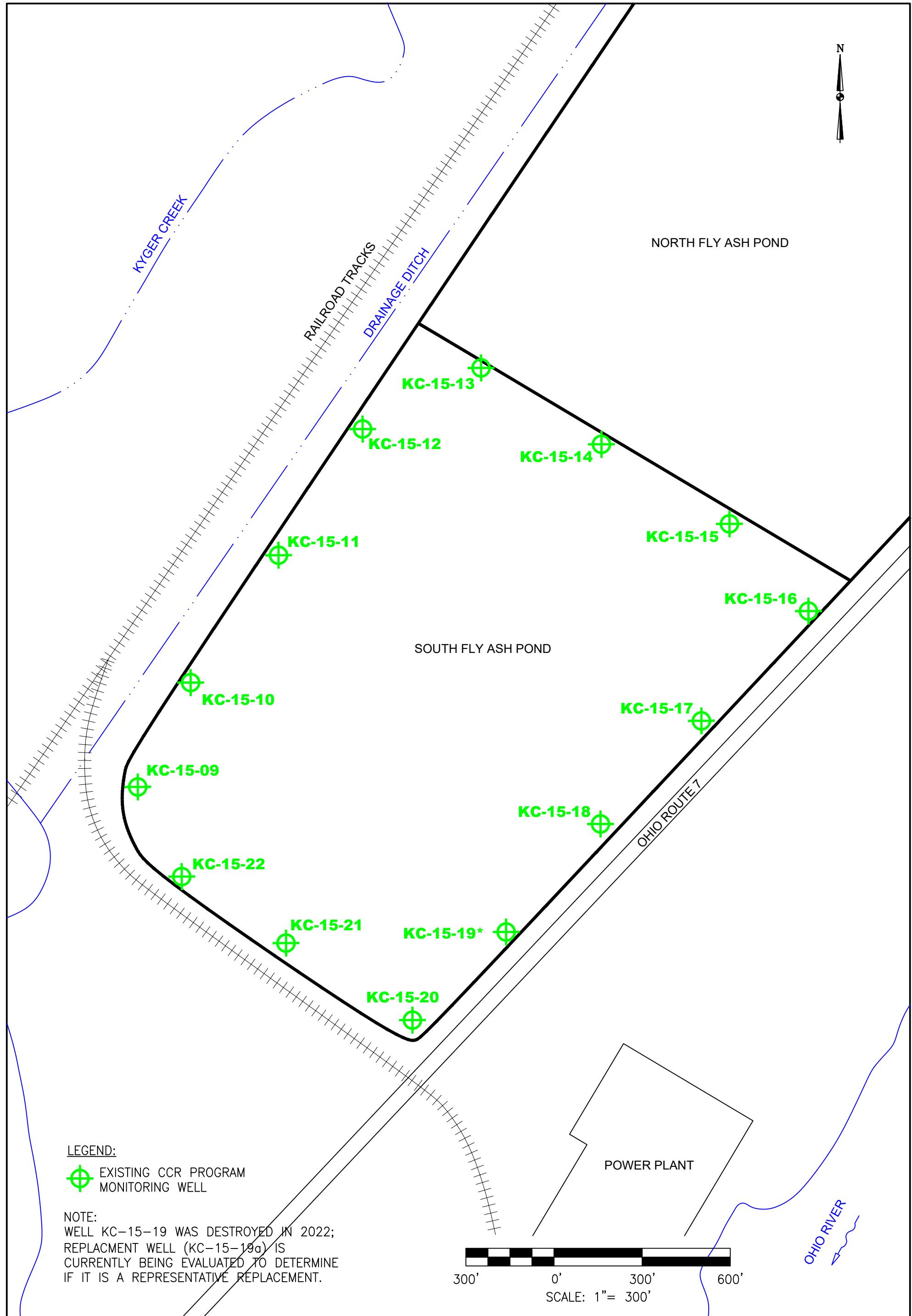
KYGER CREEK STATION  
CHESHIRE, GALLIA COUNTY, OHIO  
SITE LOCATION MAP

DRAWING NAME FIGURE 1 REV. 0

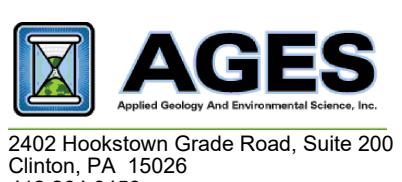
## **FIGURES**







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DATE	
CHECKED BY	
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DWG FILE	KYGER_CCR_2022 Annual GW Rpt_Ponds+MWs b03-b04.dwg
DRAWING SCALE	1"=300'



OHIO VALLEY ELECTRIC COMPANY	
KYGER CREEK STATION	
CHESHIRE, GALLIA COUNTY, OHIO	
SOUTH FLY ASH POND	
GROUNDWATER MONITORING WELL LOCATIONS	
DRAWING NAME	FIGURE 4
REV.	0

**APPENDIX A**

**GROUNDWATER ELEVATIONS**

**TABLE A-1**  
**SUMMARY OF GROUNDWATER ELEVATION DATA DURING 2025**  
**CLASS III RESIDUAL WASTE LANDFILL**  
**CCR GROUNDWATER MONITORING PROGRAM**  
**KYGER CREEK STATION**  
**CHESHIRE, OHIO**

Well ID	Mar/Apr-25	Jul-25	Oct-25	Dec-25
	Groundwater Elevation (ft)			
<b>BuSW-1</b>	568.70	568.58	568.89	566.30
<b>BuSW-2</b>	571.59	571.90	571.05	569.37
<b>BuSW-3</b>	585.66	611.44	613.35	583.68
<b>BuSW-4</b>	551.49	NM	562.69	558.85
<b>BuSW-5</b>	575.47	577.13	577.28	574.99
<b>BuSW-8</b>	567.90	564.89	564.88	562.72
<b>BuSW-10</b>	565.78	566.15	566.43	563.62
<b>IMW-2Bu</b>	564.69	565.54	566.06	563.15
<b>CCR-2Bu</b>	567.24	566.86	567.30	565.72
<b>MW-3D</b>	610.49	578.54	578.50	575.14
<b>MW-4D</b>	566.22	566.25	566.70	564.20

Notes:

1. NM: Not Measured

**TABLE A-2**  
**SUMMARY OF GROUNDWATER ELEVATION DATA DURING 2025**  
**BOILER SLAG POND**  
**CCR GROUNDWATER MONITORING PROGRAM**  
**KYGER CREEK STATION**  
**CHESHIRE, OHIO**

Well ID	Mar-25	Jul-25	Oct-25	Dec-25
	Groundwater Elevation (ft)			
<b>KC-15-01</b>	542.08	542.34	541.86	542.47
<b>KC-15-02</b>	543.05	543.36	542.77	543.50
<b>KC-15-03</b>	544.20	544.63	544.05	544.83
<b>KC-15-04</b>	538.51	540.09	539.59	538.66
<b>KC-15-05a</b>	538.78	538.63	538.34	538.72
<b>KC-15-06</b>	538.71	520.29	538.49	539.50
<b>KC-15-07</b>	538.70	538.55	538.41	538.57
<b>KC-15-08</b>	539.79	539.23	538.70	539.11
<b>KC-19-27</b>	NM	540.01	540.12	538.74
<b>KC-19-28</b>	NM	539.79	539.07	538.67
<b>KC-19-29</b>	NM	539.73	539.50	538.50

Notes:

1. NM: Not Measured. Wells were inaccessible due to flood conditions.

**TABLE A-3**  
**SUMMARY OF GROUNDWATER ELEVATION DATA DURING 2025**  
**SOUTH FLY ASH POND**  
**CCR GROUNDWATER MONITORING PROGRAM**  
**KYGER CREEK STATION**  
**CHESHIRE, OHIO**

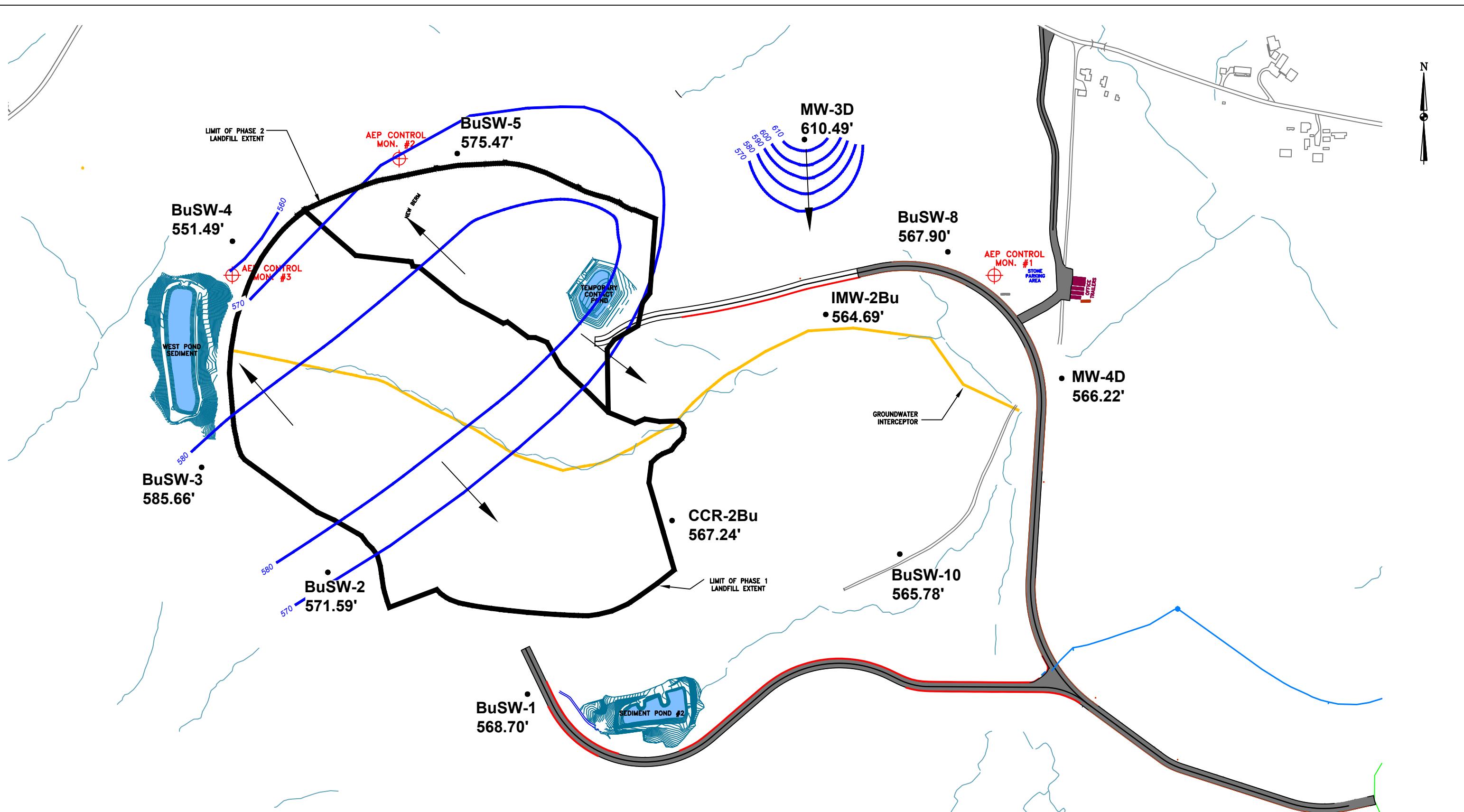
Well ID	Mar-25	Jul-25	Oct-25	Dec-25
	Groundwater Elevation (ft)			
<b>KC-15-09</b>	540.32	540.93	540.63	540.64
<b>KC-15-10</b>	540.52	541.43	540.55	540.86
<b>KC-15-11</b>	541.61	541.90	540.78	541.13
<b>KC-15-12</b>	541.26	541.50	540.97	541.33
<b>KC-15-13</b>	540.81	541.47	540.98	541.28
<b>KC-15-14</b>	540.72	541.99	540.93	NM
<b>KC-15-15</b>	540.41	540.96	540.22	540.69
<b>KC-15-16</b>	540.20	525.60	540.19	540.81
<b>KC-15-17</b>	540.40	NM	NM	540.81
<b>KC-15-18</b>	540.11	540.59	539.95	540.61
<b>KC-15-19a</b>	540.55	540.80	540.26	540.82
<b>KC-15-20</b>	539.99	540.29	539.76	540.35
<b>KC-15-21</b>	540.09	540.51	540.01	540.19
<b>KC-15-22</b>	540.56	540.76	540.02	540.46

Notes:

1. NM: Not Measured. Wells were unable to be located.

**APPENDIX B**

**GROUNDWATER FLOW MAPS**



LEGEND:

● BuSW-1 BUFFALO SANDSTONE WELL

400' 0' 400' 800'  
SCALE: 1" = 400'

DRAWN BY GRM  
DATE 12-18-2025  
CHECKED BY  
JOB NO. 2025036  
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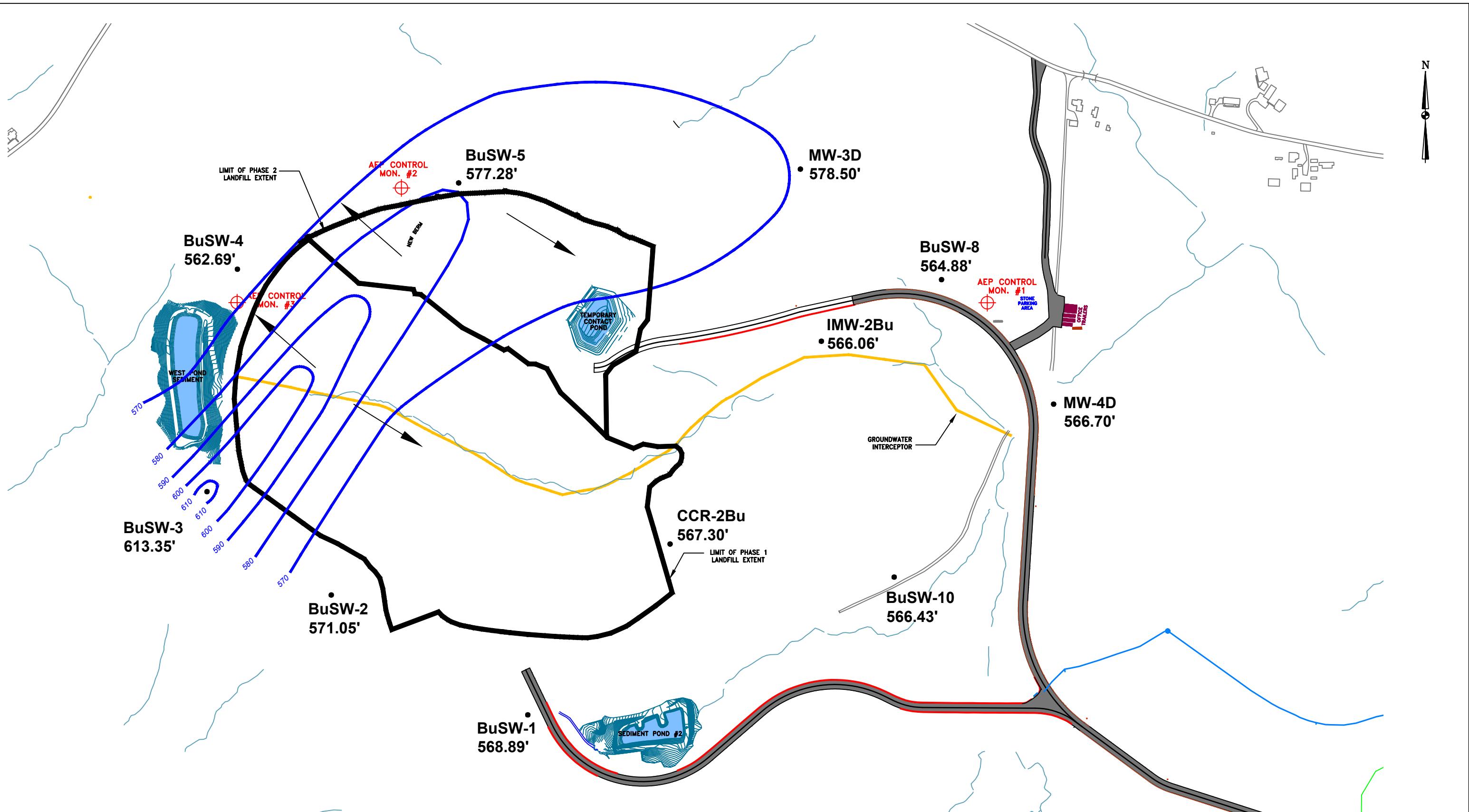


2402 Hookstown Grade Road, Suite 200  
Clinton, PA 15026  
412.264.6453

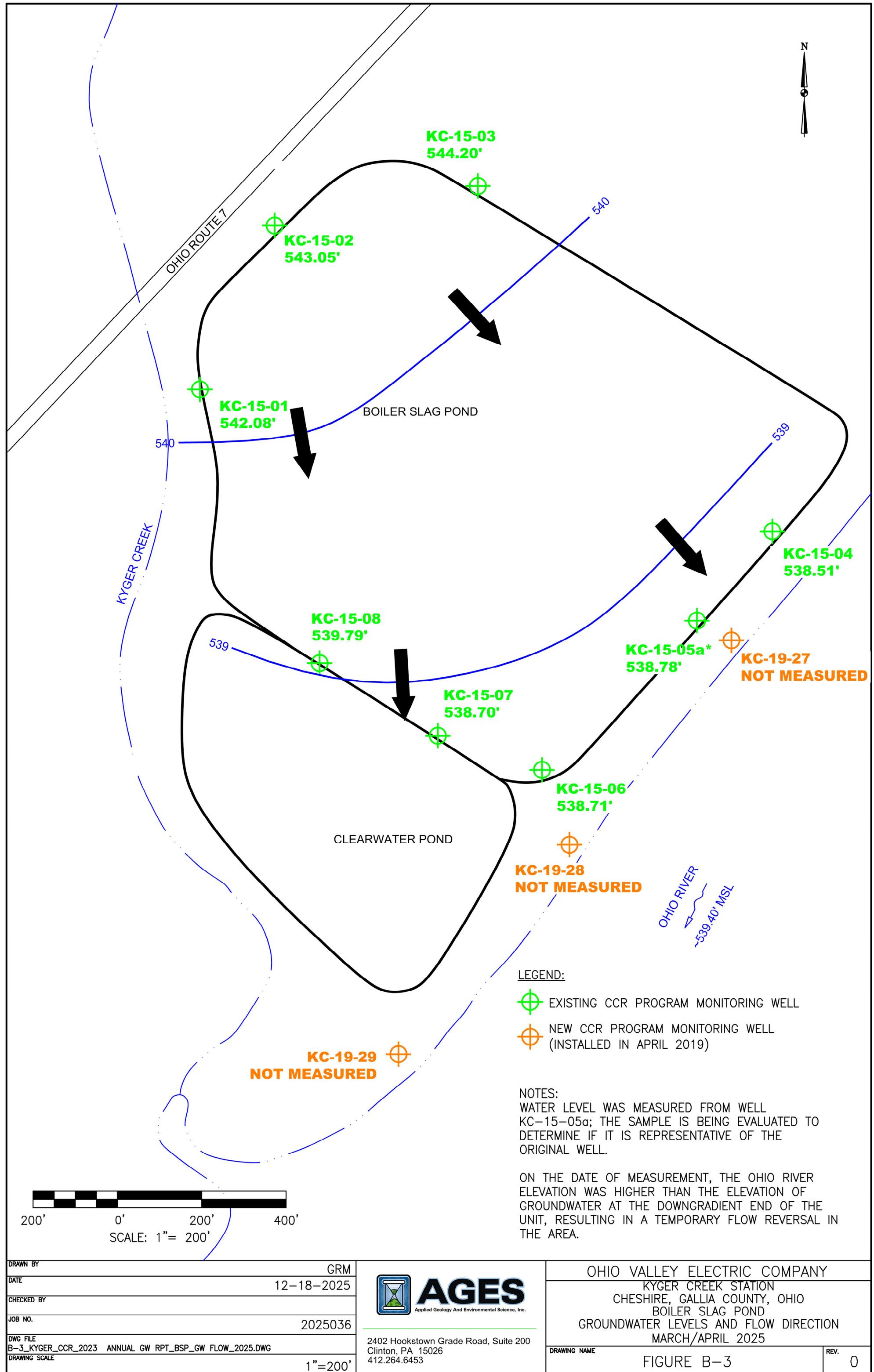
OHIO VALLEY ELECTRIC COMPANY  
KYGER CREEK STATION  
CHESHIRE, GALLIA COUNTY, OHIO  
CLASS III RESIDUAL WASTE LANDFILL  
GROUNDWATER ELEVATIONS AND FLOW MAP  
MARCH/APRIL 2025

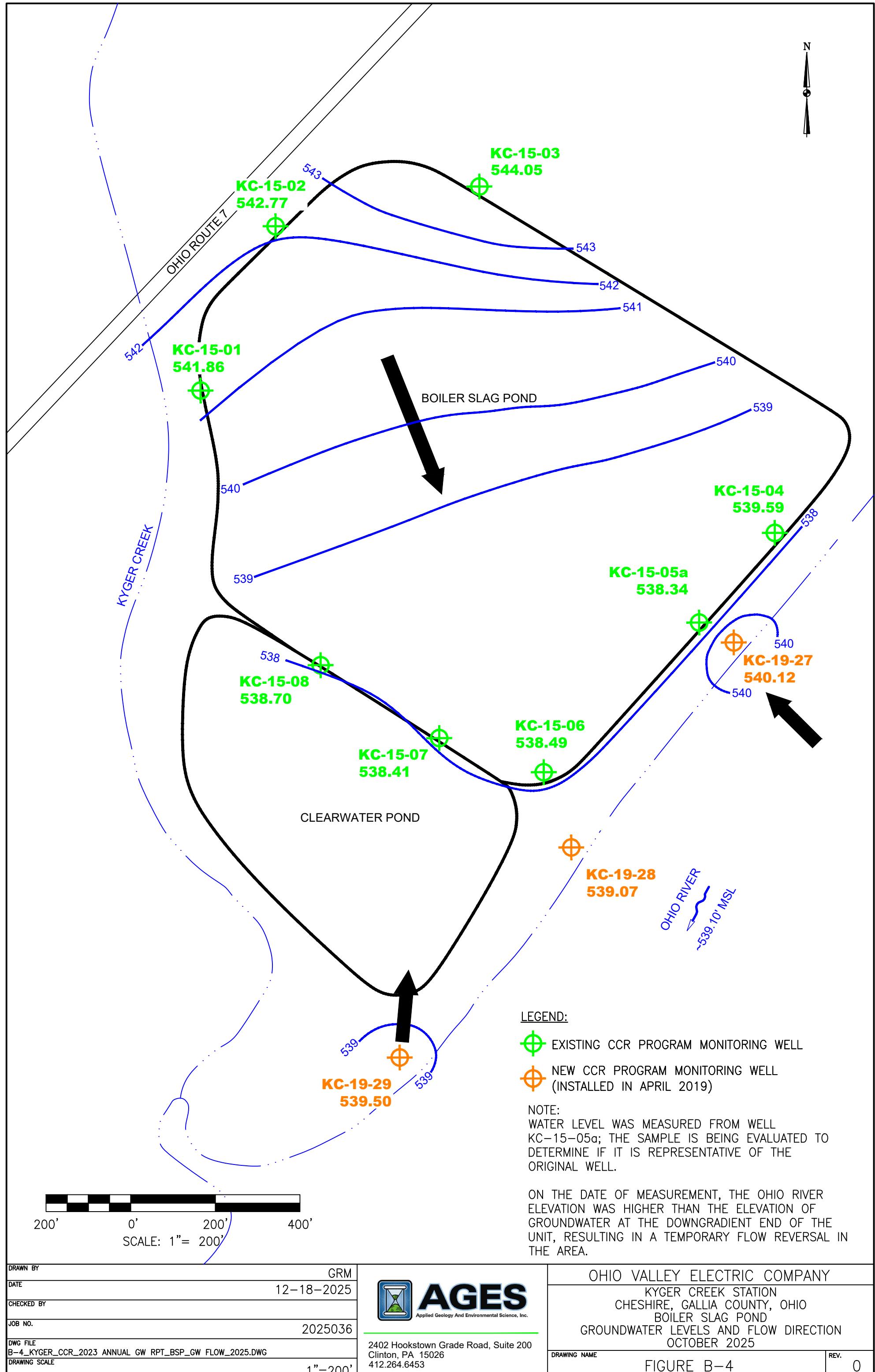
FIGURE B-1

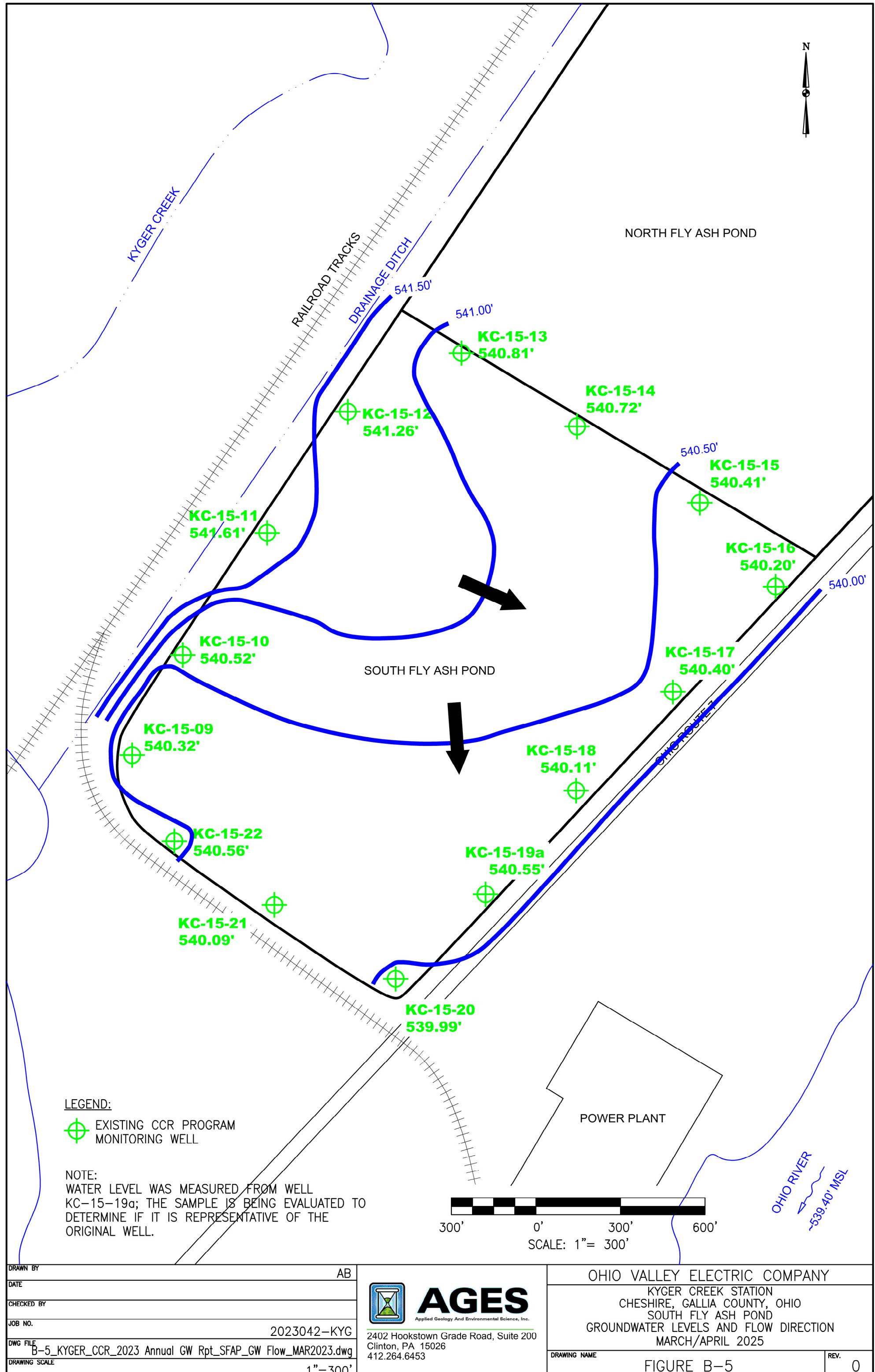
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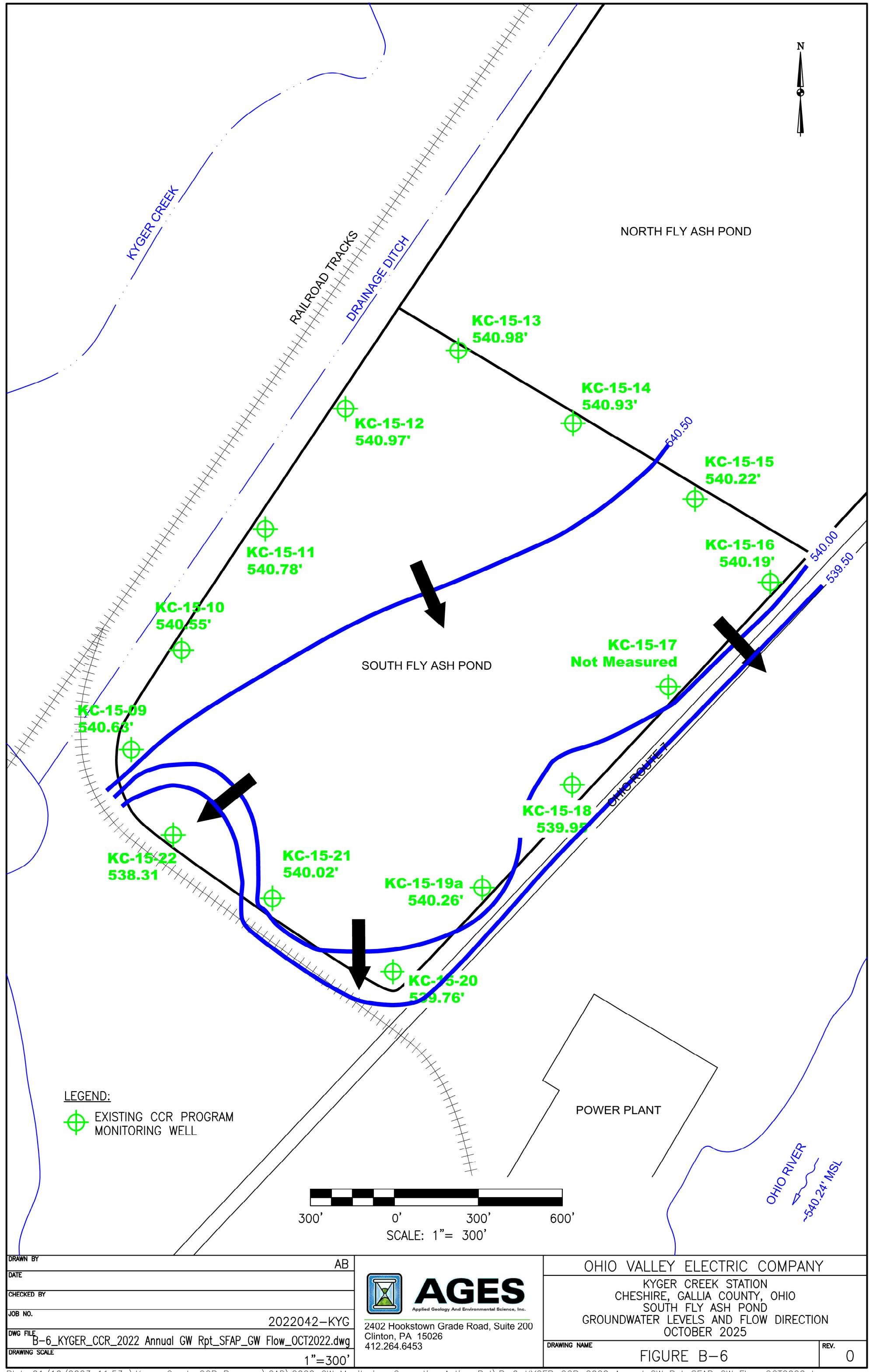


OHIO VALLEY ELECTRIC COMPANY	
KYGER CREEK STATION	
CHESHIRE, GALLIA COUNTY, OHIO	
CLASS III RESIDUAL WASTE LANDFILL	
GROUNDWATER ELEVATIONS AND FLOW MAP	
OCTOBER 2025	
DRAWING NAME	FIGURE B-2
REV.	0









**APPENDIX C**

**APPENDIX III AND APPENDIX IV CONSTITUENTS**

**APPENDIX III AND APPENDIX IV CONSTITUENTS  
KYGGER CREEK STATION  
CHESHIRE, OHIO**

<b>Appendix III Constituents</b>
Boron, B
Calcium, Ca
Chloride, Cl
Fluoride, F
pH (units=SU)
Sulfate, SO <sub>4</sub>
Total Dissolved Solids (TDS)
<b>Appendix IV Constituents</b>
Antimony, Sb
Arsenic, As
Barium, Ba
Beryllium, Be
Cadmium, Cd
Chromium, Cr
Cobalt, Co
Fluoride, F
Lithium, Li
Lead, Pb
Mercury, Hg
Molybdenum, Mo
Radium 226 & 228 (combined)(units=pCi/L)
Selenium, Se
Thallium, Tl

**APPENDIX D**  
**ANALYTICAL RESULTS**

**BuSW-1**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	0.32	0.3
Calcium, Ca	mg/L	16	19
Chloride, Cl	mg/L	2100	1800
Fluoride, F	mg/L	2.3	1.6
pH	s.u.	7.51	7.07
Sulfate, SO <sub>4</sub>	mg/L	120	130
Total Dissolved Solids (TDS)	mg/L	3500	3200

**BuSW-2**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	0.42	0.39
Calcium, Ca	mg/L	71	64
Chloride, Cl	mg/L	5100	3700
Fluoride, F	mg/L	1.8	2.3 J
pH	s.u.	7.05	7.03
Sulfate, SO <sub>4</sub>	mg/L	40 U	55
Total Dissolved Solids (TDS)	mg/L	7100	5900

**BuSW-3**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	0.51	0.38
Calcium, Ca	mg/L	1100	1000
Chloride, Cl	mg/L	18000	18000
Fluoride, F	mg/L	5 U	5 U
pH	s.u.	7.66	7.11
Sulfate, SO <sub>4</sub>	mg/L	200 U	100 J
Total Dissolved Solids (TDS)	mg/L	32000	31000

**BuSW-4**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	0.4	0.33
Calcium, Ca	mg/L	1100	1100
Chloride, Cl	mg/L	18000	19000
Fluoride, F	mg/L	4.6 J	5 U
pH	s.u.	7.14	7.03
Sulfate, SO <sub>4</sub>	mg/L	130 J	68 J
Total Dissolved Solids (TDS)	mg/L	31000	32000

**BuSW-5**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	0.39	0.32
Calcium, Ca	mg/L	590	570
Chloride, Cl	mg/L	17000	16000
Fluoride, F	mg/L	5 U	5 U
pH	s.u.	7	7.13
Sulfate, SO <sub>4</sub>	mg/L	200 U	54 J
Total Dissolved Solids (TDS)	mg/L	24000	22000

**BuSW-8**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	0.4	0.33
Calcium, Ca	mg/L	500	510
Chloride, Cl	mg/L	11000	13000
Fluoride, F	mg/L	5 U	5 U
pH	s.u.	6.99	7.16
Sulfate, SO <sub>4</sub>	mg/L	120 J	53 J
Total Dissolved Solids (TDS)	mg/L	21000	21000

**BuSW-10**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	0.41	0.43
Calcium, Ca	mg/L	58	46
Chloride, Cl	mg/L	3300	2900
Fluoride, F	mg/L	1.5	1.5
pH	s.u.	7.1	7.00
Sulfate, SO <sub>4</sub>	mg/L	40 U	140
Total Dissolved Solids (TDS)	mg/L	5000	5000

**CCR-2BU**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	0.3	0.15
Calcium, Ca	mg/L	78	9.6
Chloride, Cl	mg/L	4500	1200
Fluoride, F	mg/L	1.8	1.3
pH	s.u.	7.05	7.16
Sulfate, SO <sub>4</sub>	mg/L	43	38
Total Dissolved Solids (TDS)	mg/L	6900	2300

**IMW-2BU**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	0.44	0.38
Calcium, Ca	mg/L	380	340
Chloride, Cl	mg/L	11000	13000
Fluoride, F	mg/L	2.5 U	5 U
pH	s.u.	7.22	7.06
Sulfate, SO <sub>4</sub>	mg/L	76 J	59 J
Total Dissolved Solids (TDS)	mg/L	16000	16000

**MW-3D**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	0.45	0.35
Calcium, Ca	mg/L	1200	1200
Chloride, Cl	mg/L	17000	18000
Fluoride, F	mg/L	3.7 J	5 U
pH	s.u.	7.44	6.94
Sulfate, SO <sub>4</sub>	mg/L	200 U	49 J
Total Dissolved Solids (TDS)	mg/L	34000	34000

**MW-4D**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	0.4	0.41
Calcium, Ca	mg/L	3.4	4.1
Chloride, Cl	mg/L	200	210
Fluoride, F	mg/L	1.2	1.5
pH	s.u.	7.14	7.17
Sulfate, SO <sub>4</sub>	mg/L	260	270
Total Dissolved Solids (TDS)	mg/L	1200	1200

**KC-15-01**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	0.17	0.098
Calcium, Ca	mg/L	96	110
Chloride, Cl	mg/L	34	35
Fluoride, F	mg/L	0.098 J	0.2
pH	s.u.	6.93	6.05
Sulfate, SO <sub>4</sub>	mg/L	210	160
Total Dissolved Solids (TDS)	mg/L	510	500
<b>Appendix IV Constituents</b>			
Antimony, Sb	ug/L	5 U	1 U
Arsenic, As	ug/L	2.3 J	2.2
Barium, Ba	ug/L	44	58
Beryllium, Be	ug/L	3.5 U	0.70 U
Cadmium, Cd	ug/L	2.5 U	0.50 U
Chromium, Cr	ug/L	7.5 U	1.5 U
Cobalt, Co	ug/L	4.4	3.8
Fluoride, F	mg/L	0.098 J	0.2
Lead, Pb	ug/L	0.21 J	1 U
Lithium, Li	mg/L	0.02 U	0.012
Mercury, Hg	ug/L	0.20 U	0.20 U
Molybdenum, Mo	ug/L	0.39 J	0.63 J
Radium 226 & 228 (combined)	pCi/L	0.872	5 U
Selenium, Se	ug/L	5 U	1 U
Thallium, Tl	ug/L	0.20 U	0.20 U

**KC-15-02**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	0.14	0.18
Calcium, Ca	mg/L	120	130
Chloride, Cl	mg/L	1 U	35
Fluoride, F	mg/L	0.10 U	0.32
pH	s.u.	6.25	6.31
Sulfate, SO <sub>4</sub>	mg/L	4 U	190
Total Dissolved Solids (TDS)	mg/L	540	580
<b>Appendix IV Constituents</b>			
Antimony, Sb	ug/L	5 U	1 U
Arsenic, As	ug/L	3.1 J	3.7
Barium, Ba	ug/L	130	140
Beryllium, Be	ug/L	3.5 U	0.70 U
Cadmium, Cd	ug/L	2.5 U	0.50 U
Chromium, Cr	ug/L	7.5 U	5.8
Cobalt, Co	ug/L	2.6	1.1
Fluoride, F	mg/L	0.10 U	0.32
Lead, Pb	ug/L	0.21 J	1 U
Lithium, Li	mg/L	0.02 U	0.0052
Mercury, Hg	ug/L	0.20 U	0.20 U
Molybdenum, Mo	ug/L	0.98 J	0.94 J
Radium 226 & 228 (combined)	pCi/L	0.860	1.70
Selenium, Se	ug/L	5 U	1 U
Thallium, Tl	ug/L	0.20 U	0.20 U

**KC-15-03**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	0.96	1.3
Calcium, Ca	mg/L	130	130
Chloride, Cl	mg/L	29	30
Fluoride, F	mg/L	0.11	0.21 J
pH	s.u.	7.11	6.27
Sulfate, SO <sub>4</sub>	mg/L	210	230
Total Dissolved Solids (TDS)	mg/L	560	580
<b>Appendix IV Constituents</b>			
Antimony, Sb	ug/L	1 U	1 U
Arsenic, As	ug/L	0.88 J	1.1
Barium, Ba	ug/L	53	64
Beryllium, Be	ug/L	0.70 U	0.70 U
Cadmium, Cd	ug/L	0.50 U	0.50 U
Chromium, Cr	ug/L	1.5 U	1.2 J
Cobalt, Co	ug/L	2.1	1.7
Fluoride, F	mg/L	0.11	0.21 J
Lead, Pb	ug/L	0.21 J	0.77 J
Lithium, Li	mg/L	0.012	0.0082
Mercury, Hg	ug/L	0.20 U	0.20 U
Molybdenum, Mo	ug/L	0.47 J	0.78 J
Radium 226 & 228 (combined)	pCi/L	5 U	4.36
Selenium, Se	ug/L	1 U	1 U
Thallium, Tl	ug/L	0.20 U	0.20 U

**KC-15-04**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25	Dec-25
<b>Appendix III Constituents</b>				
Boron, B	mg/L	0.4	0.43	NA
Calcium, Ca	mg/L	130	100	NA
Chloride, Cl	mg/L	23	26	NA
Fluoride, F	mg/L	0.16	0.24 J	0.25 U
pH	s.u.	6.33	6.02	NA
Sulfate, SO <sub>4</sub>	mg/L	310	300	NA
Total Dissolved Solids (TDS)	mg/L	630	570	NA
<b>Appendix IV Constituents</b>				
Antimony, Sb	ug/L	1 U	1 U	NA
Arsenic, As	ug/L	2.9	1.7	NA
Barium, Ba	ug/L	67	45	NA
Beryllium, Be	ug/L	0.17 J	0.089 J	NA
Cadmium, Cd	ug/L	0.17 J	0.099 J	NA
Chromium, Cr	ug/L	3.6	1.3 J	NA
Cobalt, Co	ug/L	8.1	8.7	NA
Fluoride, F	mg/L	0.16	0.24 J	NA
Lead, Pb	ug/L	1.9	0.71 J	NA
Lithium, Li	mg/L	0.011	0.011	NA
Mercury, Hg	ug/L	0.20 U	0.20 U	NA
Molybdenum, Mo	ug/L	2.9	1.8	NA
Radium 226 & 228 (combined)	pCi/L	0.749	4.41	NA
Selenium, Se	ug/L	1 U	1 U	NA
Thallium, Tl	ug/L	0.14 J	0.075 J	NA

Notes:

NA: Sampling not required for this parameter.

**KC-15-05a**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25	Dec-25
<b>Appendix III Constituents</b>				
Boron, B	mg/L	0.58	0.6	NA
Calcium, Ca	mg/L	130	140	130
Chloride, Cl	mg/L	30	28	NA
Fluoride, F	mg/L	0.14	0.24 J	0.25 U
pH	s.u.	7.28	6.03	NA
Sulfate, SO <sub>4</sub>	mg/L	300	330	280
Total Dissolved Solids (TDS)	mg/L	680	670	630
<b>Appendix IV Constituents</b>				
Antimony, Sb	ug/L	1 U	1 U	NA
Arsenic, As	ug/L	2.1	1.5	NA
Barium, Ba	ug/L	52	53	NA
Beryllium, Be	ug/L	0.70 U	0.70 U	NA
Cadmium, Cd	ug/L	0.50 U	0.50 U	NA
Chromium, Cr	ug/L	1.3 J	1.5 U	NA
Cobalt, Co	ug/L	5.8	5.7	NA
Fluoride, F	mg/L	0.14	0.24 J	NA
Lead, Pb	ug/L	0.59 J	0.61 J	NA
Lithium, Li	mg/L	0.0041	0.0044	NA
Mercury, Hg	ug/L	0.20 U	0.20 U	NA
Molybdenum, Mo	ug/L	0.65 J	1.8	NA
Radium 226 & 228 (combined)	pCi/L	5 U	3.11	NA
Selenium, Se	ug/L	1 U	1 U	NA
Thallium, Tl	ug/L	0.20 U	0.20 U	NA

Notes:

NA: Sampling not required for this parameter.

Results for well KC-15-05a are provided; the facility is evaluating whether the sampling results are the result of an error in accordance with 40 C.F.R. § 257.95(g)(3)(ii).

**KC-15-06**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25	Dec-25
<b>Appendix III Constituents</b>				
Boron, B	mg/L	0.43	0.56	NA
Calcium, Ca	mg/L	100	110	NA
Chloride, Cl	mg/L	35	40	NA
Fluoride, F	mg/L	0.15	0.23 J	NA
pH	s.u.	6.59	6.28	NA
Sulfate, SO <sub>4</sub>	mg/L	180	230	NA
Total Dissolved Solids (TDS)	mg/L	510	550	NA
<b>Appendix IV Constituents</b>				
Antimony, Sb	ug/L	1 U	1 U	NA
Arsenic, As	ug/L	2.2	4.5	NA
Barium, Ba	ug/L	150	160	NA
Beryllium, Be	ug/L	0.13 J	0.70 U	NA
Cadmium, Cd	ug/L	0.20 J	0.12 J	NA
Chromium, Cr	ug/L	1.5 U	4.2	NA
Cobalt, Co	ug/L	1.8	1.6	NA
Fluoride, F	mg/L	0.15	0.23 J	NA
Lead, Pb	ug/L	0.58 J	0.75 J	NA
Lithium, Li	mg/L	0.0052	0.0048	NA
Mercury, Hg	ug/L	0.20 U	0.20 U	NA
Molybdenum, Mo	ug/L	1.4	0.79 J	NA
Radium 226 & 228 (combined)	pCi/L	5 U	5.37	5 U
Selenium, Se	ug/L	1 U	1 U	NA
Thallium, Tl	ug/L	0.29	0.20 U	NA

Notes:

NA: Sampling not required for this parameter.

**KC-15-07**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Jul-25	Oct-25	Dec-25
<b>Appendix III Constituents</b>					
Boron, B	mg/L	0.38	NA	0.37	NA
Calcium, Ca	mg/L	130	NA	130	NA
Chloride, Cl	mg/L	41	40	39	NA
Fluoride, F	mg/L	0.12	NA	0.18 J	NA
pH	s.u.	6.7	NA	6.35	NA
Sulfate, SO <sub>4</sub>	mg/L	230	NA	210	NA
Total Dissolved Solids (TDS)	mg/L	650	600	610	430
<b>Appendix IV Constituents</b>					
Antimony, Sb	ug/L	1 U	NA	1 U	NA
Arsenic, As	ug/L	76	45	85	200
Barium, Ba	ug/L	350	NA	320	NA
Beryllium, Be	ug/L	0.70 U	NA	0.70 U	NA
Cadmium, Cd	ug/L	0.50 U	NA	0.50 U	NA
Chromium, Cr	ug/L	1.5 U	NA	1.5 U	NA
Cobalt, Co	ug/L	0.67	NA	1.3	NA
Fluoride, F	mg/L	0.12	NA	0.18 J	NA
Lead, Pb	ug/L	1 U	NA	0.24 J	NA
Lithium, Li	mg/L	0.0065	NA	0.0064	NA
Mercury, Hg	ug/L	0.20 U	NA	0.20 U	NA
Molybdenum, Mo	ug/L	2	NA	2.4	NA
Radium 226 & 228 (combined)	pCi/L	1.16	NA	3.55	NA
Selenium, Se	ug/L	1 U	NA	1 U	NA
Thallium, Tl	ug/L	0.20 U	NA	0.20 U	NA

Notes:

NA: Sampling not required for this parameter.

**KC-15-08**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Jul-25	Oct-25	Dec-25
<b>Appendix III Constituents</b>					
Boron, B	mg/L	0.53	NA	1.1	0.99
Calcium, Ca	mg/L	160	290	260	250
Chloride, Cl	mg/L	39	NA	41	NA
Fluoride, F	mg/L	0.14	NA	0.18 J	NA
pH	s.u.	6.19	NA	6.42	NA
Sulfate, SO <sub>4</sub>	mg/L	360	740	670	640
Total Dissolved Solids (TDS)	mg/L	810	1400	1200	1200
<b>Appendix IV Constituents</b>					
Antimony, Sb	ug/L	5 U	NA	1 U	NA
Arsenic, As	ug/L	4.4 J	NA	12	8.5
Barium, Ba	ug/L	55	NA	53	NA
Beryllium, Be	ug/L	3.5 U	NA	0.70 U	NA
Cadmium, Cd	ug/L	2.5 U	NA	0.50 U	NA
Chromium, Cr	ug/L	7.5 U	NA	1.5 U	NA
Cobalt, Co	ug/L	11	4.4	5.7	NA
Fluoride, F	mg/L	0.14	NA	0.18 J	NA
Lead, Pb	ug/L	1 U	NA	1 U	NA
Lithium, Li	mg/L	0.036	NA	0.0066	NA
Mercury, Hg	ug/L	0.20 U	NA	0.20 U	NA
Molybdenum, Mo	ug/L	0.36 J	NA	0.59 J	NA
Radium 226 & 228 (combined)	pCi/L	0.658	NA	2.01	NA
Selenium, Se	ug/L	5 U	NA	1 U	NA
Thallium, Tl	ug/L	0.20 U	NA	0.20 U	NA

Notes:

NA: Sampling not required for this parameter.

**KC-19-27**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25	Dec-25
<b>Appendix IV Constituents</b>				
Arsenic, As	ug/L	8.9	12	9.4

**KC-19-28**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix IV Constituents</b>			
Arsenic, As	ug/L	5 U	0.58 J

**KC-19-29**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix IV Constituents</b>			
Arsenic, As	ug/L	5 U	1.9

**KC-15-09**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	0.019 J	0.018 J
Calcium, Ca	mg/L	80	76
Chloride, Cl	mg/L	12	12
Fluoride, F	mg/L	0.25	0.24
pH	s.u.	6.15	6.16
Sulfate, SO <sub>4</sub>	mg/L	54	53
Total Dissolved Solids (TDS)	mg/L	310	310
<b>Appendix IV Constituents</b>			
Antimony, Sb	ug/L	1 U	1 U
Arsenic, As	ug/L	1.5	0.62 J
Barium, Ba	ug/L	34	25
Beryllium, Be	ug/L	0.70 U	0.099 J
Cadmium, Cd	ug/L	0.50 U	0.50 U
Chromium, Cr	ug/L	4.7	1.5 U
Cobalt, Co	ug/L	2	1.6
Fluoride, F	mg/L	0.25	0.24
Lead, Pb	ug/L	0.21 J	1 U
Lithium, Li	mg/L	0.0079	0.0078
Mercury, Hg	ug/L	0.20 U	0.20 U
Molybdenum, Mo	ug/L	0.47 J	0.27 J
Radium 226 & 228 (combined)	pCi/L	5 U	1.34
Selenium, Se	ug/L	1 U	1 U
Thallium, Tl	ug/L	0.20 U	0.20 U

**KC-15-10**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	0.019 J	0.020 U
Calcium, Ca	mg/L	70	61
Chloride, Cl	mg/L	8.5	9.6
Fluoride, F	mg/L	0.25	0.25
pH	s.u.	6.19	5.8
Sulfate, SO <sub>4</sub>	mg/L	62	61
Total Dissolved Solids (TDS)	mg/L	310	280
<b>Appendix IV Constituents</b>			
Antimony, Sb	ug/L	1 U	1 U
Arsenic, As	ug/L	2.5	1.2
Barium, Ba	ug/L	46	30
Beryllium, Be	ug/L	0.70 U	0.11 J
Cadmium, Cd	ug/L	0.082 J	0.50 U
Chromium, Cr	ug/L	1.5 U	1.5 U
Cobalt, Co	ug/L	1.4	0.97
Fluoride, F	mg/L	0.25	0.25
Lead, Pb	ug/L	0.43 J	1 U
Lithium, Li	mg/L	0.008	0.007
Mercury, Hg	ug/L	0.20 U	0.20 U
Molybdenum, Mo	ug/L	0.21 J	1 U
Radium 226 & 228 (combined)	pCi/L	5 U	1.23
Selenium, Se	ug/L	1 U	1 U
Thallium, Tl	ug/L	0.20 U	0.20 U

**KC-15-11**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Jul-25	Oct-25
<b>Appendix III Constituents</b>				
Boron, B	mg/L	0.025	NA	0.024
Calcium, Ca	mg/L	83	NA	66
Chloride, Cl	mg/L	11	NA	9.9
Fluoride, F	mg/L	0.25	NA	0.3
pH	s.u.	NA	5.91	5.73
Sulfate, SO <sub>4</sub>	mg/L	90	NA	150
Total Dissolved Solids (TDS)	mg/L	360	NA	310
<b>Appendix IV Constituents</b>				
Antimony, Sb	ug/L	1 U	NA	1 U
Arsenic, As	ug/L	0.91 J	NA	1 U
Barium, Ba	ug/L	37	NA	24
Beryllium, Be	ug/L	0.70 U	NA	0.098 J
Cadmium, Cd	ug/L	0.094 J	NA	0.14 J
Chromium, Cr	ug/L	1.5 U	NA	1.5 U
Cobalt, Co	ug/L	1.3	NA	0.64
Fluoride, F	mg/L	0.25	NA	0.3
Lead, Pb	ug/L	1 U	NA	1 U
Lithium, Li	mg/L	0.0065	NA	0.0064
Mercury, Hg	ug/L	0.20 U	NA	0.20 U
Molybdenum, Mo	ug/L	1 U	NA	1 U
Radium 226 & 228 (combined)	pCi/L	5 U	NA	0.748
Selenium, Se	ug/L	1 U	NA	1 U
Thallium, Tl	ug/L	0.20 U	NA	0.20 U

**KC-15-12**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Jul-25	Oct-25
<b>Appendix III Constituents</b>				
Boron, B	mg/L	0.12	NA	0.074
Calcium, Ca	mg/L	110	NA	100
Chloride, Cl	mg/L	13	NA	11
Fluoride, F	mg/L	0.16	NA	0.16
pH	s.u.	NA	6.44	6.63
Sulfate, SO <sub>4</sub>	mg/L	84	NA	73
Total Dissolved Solids (TDS)	mg/L	380	NA	370
<b>Appendix IV Constituents</b>				
Antimony, Sb	ug/L	1 U	NA	1 U
Arsenic, As	ug/L	1.4	NA	0.58 J
Barium, Ba	ug/L	93	NA	76
Beryllium, Be	ug/L	0.70 U	NA	0.70 U
Cadmium, Cd	ug/L	0.50 U	NA	0.50 U
Chromium, Cr	ug/L	1.5 U	NA	1.5 U
Cobalt, Co	ug/L	0.69	NA	0.97
Fluoride, F	mg/L	0.16	NA	0.16
Lead, Pb	ug/L	1 U	NA	1 U
Lithium, Li	mg/L	0.004	NA	0.012
Mercury, Hg	ug/L	0.20 U	NA	0.20 U
Molybdenum, Mo	ug/L	0.59 J	NA	0.51 J
Radium 226 & 228 (combined)	pCi/L	5 U	NA	0.91
Selenium, Se	ug/L	1 U	NA	1 U
Thallium, Tl	ug/L	0.20 U	NA	0.20 U

**KC-15-13**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	6.1	NS
Calcium, Ca	mg/L	110	NS
Chloride, Cl	mg/L	79	NS
Fluoride, F	mg/L	0.12	NS
pH	s.u.	5.51	NS
Sulfate, SO <sub>4</sub>	mg/L	380	NS
Total Dissolved Solids (TDS)	mg/L	740	NS
<b>Appendix IV Constituents</b>			
Antimony, Sb	ug/L	1 U	NS
Arsenic, As	ug/L	1.8	NS
Barium, Ba	ug/L	66	NS
Beryllium, Be	ug/L	0.70 U	NS
Cadmium, Cd	ug/L	0.50 U	NS
Chromium, Cr	ug/L	1.5 U	NS
Cobalt, Co	ug/L	17	NS
Fluoride, F	mg/L	0.12	NS
Lead, Pb	ug/L	0.35 J	NS
Lithium, Li	mg/L	0.012	NS
Mercury, Hg	ug/L	0.20 U	NS
Molybdenum, Mo	ug/L	1 U	NS
Radium 226 & 228 (combined)	pCi/L	0.795	NS
Selenium, Se	ug/L	1 U	NS
Thallium, Tl	ug/L	0.20 U	NS

Notes:

NS: Not Sampled.

**KC-15-14**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	10	NS
Calcium, Ca	mg/L	67	NS
Chloride, Cl	mg/L	61	NS
Fluoride, F	mg/L	0.15	NS
pH	s.u.	6.04	NS
Sulfate, SO <sub>4</sub>	mg/L	170	NS
Total Dissolved Solids (TDS)	mg/L	440	NS
<b>Appendix IV Constituents</b>			
Antimony, Sb	ug/L	1 U	NS
Arsenic, As	ug/L	2.1	NS
Barium, Ba	ug/L	30	NS
Beryllium, Be	ug/L	0.70 U	NS
Cadmium, Cd	ug/L	0.50 U	NS
Chromium, Cr	ug/L	1.5 U	NS
Cobalt, Co	ug/L	2.9	NS
Fluoride, F	mg/L	0.15	NS
Lead, Pb	ug/L	1 U	NS
Lithium, Li	mg/L	0.018	NS
Mercury, Hg	ug/L	0.60 J	NS
Molybdenum, Mo	ug/L	0.29 J	NS
Radium 226 & 228 (combined)	pCi/L	5 U	NS
Selenium, Se	ug/L	1 U	NS
Thallium, Tl	ug/L	0.20 U	NS

Notes:

NS: Not Sampled.

**KC-15-15**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	14	14
Calcium, Ca	mg/L	73	80
Chloride, Cl	mg/L	70	63
Fluoride, F	mg/L	0.16	0.21 J
pH	s.u.	5.49	6.01
Sulfate, SO <sub>4</sub>	mg/L	220	260
Total Dissolved Solids (TDS)	mg/L	460	530
<b>Appendix IV Constituents</b>			
Antimony, Sb	ug/L	1.0U	1 U
Arsenic, As	ug/L	0.42 J	1.9
Barium, Ba	ug/L	23	40
Beryllium, Be	ug/L	0.70 U	0.70U
Cadmium, Cd	ug/L	0.92	0.22 J
Chromium, Cr	ug/L	1.5 U	1.5 U
Cobalt, Co	ug/L	7.9	4.7
Fluoride, F	mg/L	0.16	0.21 J
Lead, Pb	ug/L	1 U	1 U
Lithium, Li	mg/L	0.023	0.017
Mercury, Hg	ug/L	0.20 U	0.20U
Molybdenum, Mo	ug/L	1 U	1.0U
Radium 226 & 228 (combined)	pCi/L	1 U	2.18
Selenium, Se	ug/L	1 U	1.0U
Thallium, Tl	ug/L	0.20 U	0.20U

**KC-15-16**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	13	15
Calcium, Ca	mg/L	260	300
Chloride, Cl	mg/L	83	110
Fluoride, F	mg/L	0.25 U	0.18 J
pH	s.u.	6.33	5.89
Sulfate, SO <sub>4</sub>	mg/L	720	840
Total Dissolved Solids (TDS)	mg/L	1400	1500
<b>Appendix IV Constituents</b>			
Antimony, Sb	ug/L	1 U	1.0U
Arsenic, As	ug/L	3.7	1.4
Barium, Ba	ug/L	67	91
Beryllium, Be	ug/L	0.17 J	0.099 J
Cadmium, Cd	ug/L	0.44 J	0.56
Chromium, Cr	ug/L	3.6	1.5 U
Cobalt, Co	ug/L	11	5.5
Fluoride, F	mg/L	0.25 U	0.18 J
Lead, Pb	ug/L	2.2	0.6 J
Lithium, Li	mg/L	0.013	0.013
Mercury, Hg	ug/L	0.20 U	0.20U
Molybdenum, Mo	ug/L	1.7	0.61 J
Radium 226 & 228 (combined)	pCi/L	0.786	5.52
Selenium, Se	ug/L	5 U	1.0U
Thallium, Tl	ug/L	0.073 J	0.092 J

**KC-15-17**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	6.9	19
Calcium, Ca	mg/L	180	380
Chloride, Cl	mg/L	39	110
Fluoride, F	mg/L	0.14	0.13 J
pH	s.u.	8.93	8.08
Sulfate, SO <sub>4</sub>	mg/L	420	930
Total Dissolved Solids (TDS)	mg/L	800	1700
<b>Appendix IV Constituents</b>			
Antimony, Sb	ug/L	0.52 J	0.45 J
Arsenic, As	ug/L	3.2	2.5
Barium, Ba	ug/L	64	85
Beryllium, Be	ug/L	0.17 J	0.14 J
Cadmium, Cd	ug/L	0.16 J	0.21 J
Chromium, Cr	ug/L	75	35
Cobalt, Co	ug/L	2.5	3.6
Fluoride, F	mg/L	0.14	0.13 J
Lead, Pb	ug/L	2.8	2
Lithium, Li	mg/L	0.053	0.053
Mercury, Hg	ug/L	0.20 U	0.20U
Molybdenum, Mo	ug/L	11	6.5
Radium 226 & 228 (combined)	pCi/L	5 U	7.55
Selenium, Se	ug/L	0.86 J	0.86 J
Thallium, Tl	ug/L	0.076 J	0.089 J

**KC-15-18**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Jul-25	Oct-25	Dec-25
<b>Appendix III Constituents</b>					
Boron, B	mg/L	14	NA	14	NA
Calcium, Ca	mg/L	200	250	190	200
Chloride, Cl	mg/L	120	94	140	120
Fluoride, F	mg/L	0.13 J	NA	0.18 J	NA
pH	s.u.	6.27	NA	6.19	NA
Sulfate, SO <sub>4</sub>	mg/L	610	500	700	660
Total Dissolved Solids (TDS)	mg/L	1100	1000	1200	1200
<b>Appendix IV Constituents</b>					
Antimony, Sb	ug/L	1 U	NA	1 U	NA
Arsenic, As	ug/L	1.4	NA	0.87 J	NA
Barium, Ba	ug/L	19	NA	33	NA
Beryllium, Be	ug/L	3.5 U	NA	0.70 U	NA
Cadmium, Cd	ug/L	0.85	NA	0.85	NA
Chromium, Cr	ug/L	8.9	NA	3.9	NA
Cobalt, Co	ug/L	9.4	NA	10	NA
Fluoride, F	mg/L	0.13 J	NA	0.18 J	NA
Lead, Pb	ug/L	1.4	NA	0.53 J	NA
Lithium, Li	mg/L	0.04	NA	0.038	NA
Mercury, Hg	ug/L	0.20 U	NA	0.20 U	NA
Molybdenum, Mo	ug/L	0.89 J	NA	1.7	NA
Radium 226 & 228 (combined)	pCi/L	5 U	NA	2.72	NA
Selenium, Se	ug/L	1 U	NA	1 U	NA
Thallium, Tl	ug/L	0.20 U	NA	0.20 U	NA

Notes:

NA: Sampling not required for this parameter.

**KC-15-19a**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Jul-25	Oct-25	Dec-25
<b>Appendix III Constituents</b>					
Boron, B	mg/L	15	NA	15	NA
Calcium, Ca	mg/L	150	140	150	150
Chloride, Cl	mg/L	51	NA	67	NA
Fluoride, F	mg/L	0.25 U	NA	0.2 J	NA
pH	s.u.	5.86	NA	6.04	NA
Sulfate, SO <sub>4</sub>	mg/L	390	NA	450	NA
Total Dissolved Solids (TDS)	mg/L	860	NA	850	NA
<b>Appendix IV Constituents</b>					
Antimony, Sb	ug/L	1 U	NA	1 U	NA
Arsenic, As	ug/L	0.41 J	NA	0.42 J	NA
Barium, Ba	ug/L	24	NA	21	NA
Beryllium, Be	ug/L	3.5 U	NA	0.70 U	NA
Cadmium, Cd	ug/L	0.50 U	NA	0.38 J	NA
Chromium, Cr	ug/L	7.5 U	NA	1.5 U	NA
Cobalt, Co	ug/L	15	NA	14	NA
Fluoride, F	mg/L	0.25 U	NA	0.2 J	NA
Lead, Pb	ug/L	0.44 J	NA	1.7	NA
Lithium, Li	mg/L	0.016	NA	0.018	NA
Mercury, Hg	ug/L	0.20 U	NA	0.20 U	NA
Molybdenum, Mo	ug/L	1 U	NA	1 U	NA
Radium 226 & 228 (combined)	pCi/L	0.697	NA	5 U	NA
Selenium, Se	ug/L	1 U	NA	1 U	NA
Thallium, Tl	ug/L	0.20 U	NA	0.20 U	NA

Notes:

Results for well KC-15-19a are provided; the facility is evaluating whether the sampling results are the result of an error in accordance with 40 C.F.R. § 257.95(g)(3)(ii).

**KC-15-20**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Jul-25	Oct-25	Dec-25
<b>Appendix III Constituents</b>					
Boron, B	mg/L	8.8	NA	11	NA
Calcium, Ca	mg/L	190	190	190	190
Chloride, Cl	mg/L	51	NA	67	NA
Fluoride, F	mg/L	0.16	NA	0.23 J	NA
pH	s.u.	6.26	NA	6.12	NA
Sulfate, SO <sub>4</sub>	mg/L	400	NA	460	NA
Total Dissolved Solids (TDS)	mg/L	830	NA	910	890
<b>Appendix IV Constituents</b>					
Antimony, Sb	ug/L	1 U	NA	1 U	NA
Arsenic, As	ug/L	0.87 J	NA	0.46 J	NA
Barium, Ba	ug/L	12	NA	23	NA
Beryllium, Be	ug/L	0.70 U	NA	0.70 U	NA
Cadmium, Cd	ug/L	0.36 J	NA	0.31 J	NA
Chromium, Cr	ug/L	6	NA	1.8	NA
Cobalt, Co	ug/L	0.64	NA	1	NA
Fluoride, F	mg/L	0.16	NA	0.23 J	NA
Lead, Pb	ug/L	0.76 J	NA	1 U	NA
Lithium, Li	mg/L	0.015	NA	0.013	NA
Mercury, Hg	ug/L	0.20 U	NA	0.20 U	NA
Molybdenum, Mo	ug/L	1	NA	1.1	NA
Radium 226 & 228 (combined)	pCi/L	5 U	NA	5 U	NA
Selenium, Se	ug/L	0.52 J	NA	0.5 J	NA
Thallium, Tl	ug/L	0.20 U	NA	0.20 U	NA

Notes:

NA: Sampling not required for this parameter.

**KC-15-21**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Jul-25	Oct-25	Dec-25
<b>Appendix III Constituents</b>					
Boron, B	mg/L	2.7	NA	4	NA
Calcium, Ca	mg/L	240	150	150	120
Chloride, Cl	mg/L	23	NA	34	NA
Fluoride, F	mg/L	0.32	NA	0.29	0.15 J
pH	s.u.	5.87	NA	6.55	NA
Sulfate, SO <sub>4</sub>	mg/L	540	270	260	NA
Total Dissolved Solids (TDS)	mg/L	930	650	650	NA
<b>Appendix IV Constituents</b>					
Antimony, Sb	ug/L	5 U	NA	1 U	NA
Arsenic, As	ug/L	5 U	NA	1.9	NA
Barium, Ba	ug/L	11	NA	27	NA
Beryllium, Be	ug/L	3.5 U	NA	0.21 J	NA
Cadmium, Cd	ug/L	2.5 U	NA	0.11 J	NA
Chromium, Cr	ug/L	7.5 U	NA	3	NA
Cobalt, Co	ug/L	2.5	NA	3.7	NA
Fluoride, F	mg/L	0.32	NA	0.29	NA
Lead, Pb	ug/L	0.41 J	NA	0.92 J	NA
Lithium, Li	mg/L	0.02 U	NA	0.008	NA
Mercury, Hg	ug/L	0.20 U	NA	0.048 J	NA
Molybdenum, Mo	ug/L	0.37 J	NA	1.2	NA
Radium 226 & 228 (combined)	pCi/L	5 U	NA	0.821	NA
Selenium, Se	ug/L	5 U	NA	0.64 J	NA
Thallium, Tl	ug/L	0.12 J	NA	0.07 J	NA

Notes:

NA: Sampling not required for this parameter.

**KC-15-22**  
**SUMMARY OF 2025 ANALYTICAL RESULTS**  
**Ohio Valley Electric Corporation**  
**Kyger Creek Station**  
**Gallia County, Ohio**

Parameter	Units	Mar/Apr-25	Oct-25
<b>Appendix III Constituents</b>			
Boron, B	mg/L	1.6	0.19
Calcium, Ca	mg/L	110	93
Chloride, Cl	mg/L	19	13
Fluoride, F	mg/L	0.13	0.18
pH	s.u.	6.29	6.47
Sulfate, SO <sub>4</sub>	mg/L	150	82
Total Dissolved Solids (TDS)	mg/L	490	400
<b>Appendix IV Constituents</b>			
Antimony, Sb	ug/L	1 U	1 U
Arsenic, As	ug/L	2.8	2.7
Barium, Ba	ug/L	100	65
Beryllium, Be	ug/L	0.70 U	0.12 J
Cadmium, Cd	ug/L	0.50 U	0.50 U
Chromium, Cr	ug/L	1.5 U	1.5 U
Cobalt, Co	ug/L	0.30 U	0.12 J
Fluoride, F	mg/L	0.13	0.18
Lead, Pb	ug/L	1 U	1 U
Lithium, Li	mg/L	0.0067	0.07
Mercury, Hg	ug/L	0.20 U	0.20 U
Molybdenum, Mo	ug/L	1 U	0.97 J
Radium 226 & 228 (combined)	pCi/L	5 U	1.47
Selenium, Se	ug/L	1 U	1 U
Thallium, Tl	ug/L	0.20 U	0.20 U

Notes:

NA: Sampling not required for this parameter.