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Date
January 31, 2022

Project No.
1940100711-003

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ASH POND NO. 1 COFFEEN POWER PLANT COFFEEN, ILLINOIS CCR UNIT 101

**2021 ANNUAL GROUNDWATER MONITORING AND
CORRECTIVE ACTION REPORT
COFFEEN POWER PLANT ASH POND NO. 1**

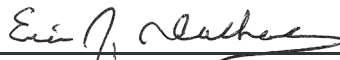
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CONTENTS

| | |
|--|-----------|
| EXECUTIVE SUMMARY | 3 |
| 1. Introduction | 4 |
| 2. Monitoring and Corrective Action Program Status | 6 |
| 3. Key Actions Completed in 2021 | 7 |
| 4. Problems Encountered and Actions to Resolve the Problems | 9 |
| 5. Key Activities Planned for 2022 | 10 |
| 6. References | 11 |

TABLES (IN TEXT)

| | |
|---------|---|
| Table A | 2020-2021 Assessment Monitoring Program Summary |
|---------|---|

TABLES (ATTACHED)

| | |
|---------|--|
| Table 1 | Groundwater Elevations |
| Table 2 | Analytical Results - Appendix III Parameters |
| Table 3 | Analytical Results - Appendix IV Parameters |
| Table 4 | Statistical Background Values |
| Table 5 | Groundwater Protection Standards |

FIGURES (ATTACHED)

| | |
|----------|------------------------------|
| Figure 1 | Monitoring Well Location Map |
|----------|------------------------------|

ACRONYMS AND ABBREVIATIONS

| | |
|-----------|--|
| § | Section |
| 40 C.F.R. | Title 40 of the Code of Federal Regulations |
| AP1 | Ash Pond No. 1 |
| ASD | Alternate Source Demonstration |
| CCR | coal combustion residuals |
| CMA | Corrective Measures Assessment |
| CPP | Coffeen Power Plant |
| GWPS | groundwater protection standard |
| NA | not applicable |
| No. | number |
| NRT/OBG | Natural Resource Technology, an OBG Company |
| Ramboll | Ramboll Americas Engineering Solutions, Inc. |
| SAP | Sampling and Analysis Plan |
| SSI | Statistically Significant Increase |
| SSL | Statistically Significant Level |
| TBD | to be determined |

EXECUTIVE SUMMARY

This report has been prepared to provide the information required by Title 40 of the Code of Federal Regulations (40 C.F.R.) Section (§) 257.90(e) for the Ash Pond Number (No.) 1 (AP1) located at Coffeen Power Plant (CPP) near Coffeen, Illinois.

Groundwater is being monitored at AP1 in accordance with the Assessment Monitoring Program requirements specified in 40 C.F.R. § 257.95. Assessment Monitoring was initiated at AP1 on April 9, 2018.

No changes were made to the monitoring system in 2021 (no wells were installed or decommissioned).

No Statistically Significant Levels (SSLs) of 40 C.F.R. § 257 Appendix IV parameters were determined in 2021. Consequently, a Corrective Measures Assessment (CMA) is not required and AP1 remains in the Assessment Monitoring Program.

1. INTRODUCTION

This report has been prepared by Ramboll Americas Engineering Solutions, Inc. (Ramboll) on behalf of Illinois Power Generating Company, to provide the information required by 40 C.F.R. § 257.90(e) for the AP1 located at the CPP near Coffeen, Illinois.

In accordance with 40 C.F.R. § 257.90(e), the owner or operator of a coal combustion residuals (CCR) unit must prepare an Annual Groundwater Monitoring and Corrective Action Report for the preceding calendar year that documents the status of the Groundwater Monitoring and Corrective Action Program for the CCR unit, summarizes key actions completed, describes any problems encountered, discusses actions to resolve the problems, and projects key activities for the upcoming year. At a minimum, the annual 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 [SSI] relative to background levels).
5. Other information required to be included in the annual report as specified in §§ 257.90 through 257.98.
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 SSI over background for one or more constituents listed in Appendix III of §257 pursuant to §257.94(e):
 - A. Identify those constituents listed in Appendix III of §257 and the names of the monitoring wells associated with the SSI(s).
 - B. Provide the date when the assessment monitoring program was initiated for the CCR unit.

- iv. If it was determined that there was a SSL above the Groundwater Protection Standard [GWPS] for one or more constituents listed in Appendix IV of §257 pursuant to §257.95(g) include all of the following:
 - A. Identify those constituents listed in Appendix IV of §257 and the names of the monitoring wells associated with the SSL(s).
 - B. Provide the date when the CMA was initiated for the CCR unit.
 - C. Provide the date when the public meeting was held for CMA for the CCR unit.
 - D. Provide the date when the CMA 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.
- vi. Whether remedial activities were initiated or are ongoing pursuant to §257.98 during the current annual reporting period.

This report provides the required information for AP1 for calendar year 2021.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

No changes have occurred to the Monitoring Program status in calendar year 2021 and AP1 remains in the Assessment Monitoring Program in accordance with 40 C.F.R. § 257.95.

3. KEY ACTIONS COMPLETED IN 2021

The Assessment Monitoring Program is summarized in **Table A** on the following page. The groundwater monitoring system, including the CCR unit and all background and compliance monitoring wells, is presented in **Figure 1**. No changes were made to the monitoring system in 2021 (no wells were installed or decommissioned). In general, one groundwater sample was collected from each background and compliance well during each monitoring event. All samples were collected and analyzed in accordance with the Sampling and Analysis Plan (SAP; Natural Resource Technology, an OBG Company [NRT/OBG], 2017a). All monitoring data obtained under 40 C.F.R. § 257.90 through 257.98 (as applicable) in 2021, and analytical results for the August 2020 sampling event, are presented in **Tables 1 to 3**. Analytical data were evaluated in accordance with the Statistical Analysis Plan (NRT/OBG, 2017b) to determine any SSLs of Appendix IV parameters over GWPSs.

Statistical background values are provided in **Table 4** and GWPSs in **Table 5**. The background values reported in **Table 4** are slightly different from those reported previously because different software was utilized to calculate these values in 2021.

Table A. 2020-2021 Assessment Monitoring Program Summary

| Sampling Dates | Analytical Data Receipt Date | Parameters Collected | SSL(s) | SSL(s) Determination Date | ASD Completion Date |
|---------------------|------------------------------|---|--------|---------------------------|---------------------|
| August 11-12, 2020 | October 15, 2020 | Appendix III Appendix IV Detected ¹ | None | January 13, 2021 | NA |
| January 26-29, 2021 | April 14, 2021 | Appendix III Appendix IV | None | July 13, 2021 | NA |
| August 17, 2021 | September 20, 2021 | Appendix III Appendix IV Detected ¹ | None | December 19, 2021 | TBD |

Notes:

NA: not applicable

TBD: to be determined

ASD: Alternate Source Demonstration

¹ Groundwater sample analysis was limited to Appendix IV parameters detected during previous events in accordance with 40 C.F.R. § 257.95(d)(1).

4. PROBLEMS ENCOUNTERED AND ACTIONS TO RESOLVE THE PROBLEMS

No problems were encountered with the Groundwater Monitoring Program during 2021. Groundwater samples were collected and analyzed in accordance with the SAP and all data were accepted.

5. KEY ACTIVITIES PLANNED FOR 2022

The following key activities are planned for 2022:

- All or part of the monitoring well network that was proposed for compliance with Title 35 of the Illinois Administrative Code § 845 is under evaluation for incorporation into the current monitoring system.
- Continuation of the Assessment Monitoring Program with semi-annual sampling scheduled for the first and third quarters of 2022.
- Complete evaluation of analytical data from the compliance wells, using GWPSs to determine whether an SSL of Appendix IV parameters has occurred.
- If an SSL is identified, potential alternate sources (*i.e.*, a source other than the CCR unit caused the SSL or that the SSL resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality) will be evaluated.
 - If an alternate source is demonstrated to be the cause of the SSL, a written demonstration will be completed within 90 days of SSL determination and included in the 2022 Annual Groundwater Monitoring and Corrective Action Report.
 - If an alternate source(s) is not identified to be the cause of the SSL, the applicable requirements of 40 C.F.R. § 257.94 through 257.98 (*e.g.*, assessment of corrective measures) as may apply in 2022 will be met, including associated recordkeeping/notifications required by 40 C.F.R. § 257.105 through 257.108.

6. REFERENCES

Natural Resource Technology, an OBG Company (NRT/OBG), 2017a. *Sampling and Analysis Plan, Coffeen Ash Pond No. 1, Coffeen Power Station, Coffeen, Illinois, Project No. 2285, Revision 0.* October 17, 2017.

Natural Resource Technology, an OBG Company (NRT/OBG), 2017b. *Statistical Analysis Plan, Coffeen Power Station, Newton Power Station, Illinois Power Generating Company.* October 17, 2017.

TABLES

TABLE 1
GROUNDWATER ELEVATIONS
 2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 101 - ASH POND NO. 1
 COFFEEN, IL

| Well ID | Well Type | Latitude (Decimal Degrees) | Longitude (Decimal Degrees) | Date | Depth to Groundwater (ft BMP) | Groundwater Elevation (ft NAVD88) |
|---------|------------|-------------------------------|--------------------------------|------------|----------------------------------|--------------------------------------|
| G281 | Background | 39.06541 | -89.39932 | 08/10/2020 | 7.10 | 619.26 |
| | | | | 01/20/2021 | 7.00 | 619.36 |
| | | | | 03/29/2021 | 4.68 | 621.68 |
| | | | | 04/20/2021 | 6.74 | 619.62 |
| | | | | 04/21/2021 | 6.59 | 619.77 |
| | | | | 05/03/2021 | 5.76 | 620.60 |
| | | | | 06/09/2021 | 6.71 | 619.65 |
| | | | | 06/14/2021 | 6.90 | 619.46 |
| | | | | 06/23/2021 | 7.65 | 618.71 |
| | | | | 07/12/2021 | 6.13 | 620.23 |
| | | | | 07/26/2021 | 6.34 | 620.02 |
| | | | | 08/16/2021 | 6.55 | 619.81 |
| | | | | 10/25/2021 | 5.52 | 620.84 |
| G301 | Compliance | 39.05951 | -89.39541 | 08/10/2020 | 7.49 | 615.16 |
| | | | | 01/20/2021 | 6.62 | 616.03 |
| | | | | 03/29/2021 | Not Measured | |
| | | | | 04/20/2021 | 6.60 | 616.05 |
| | | | | 05/03/2021 | 6.53 | 616.12 |
| | | | | 05/17/2021 | 6.66 | 615.99 |
| | | | | 06/09/2021 | 7.02 | 615.63 |
| | | | | 06/23/2021 | 7.63 | 615.02 |
| | | | | 07/12/2021 | 6.86 | 615.79 |
| | | | | 07/26/2021 | 7.34 | 615.31 |
| | | | | 08/16/2021 | 7.20 | 615.45 |
| | | | | 10/25/2021 | 5.87 | 616.78 |
| G302 | Compliance | 39.05954 | -89.39319 | 08/10/2020 | 11.99 | 608.05 |
| | | | | 01/20/2021 | 10.05 | 609.99 |
| | | | | 03/29/2021 | Not Measured | |
| | | | | 04/20/2021 | 8.19 | 611.85 |
| | | | | 05/03/2021 | 7.97 | 612.07 |
| | | | | 05/17/2021 | 7.98 | 612.06 |
| | | | | 06/09/2021 | 9.75 | 610.29 |
| | | | | 06/23/2021 | 11.25 | 608.79 |
| | | | | 07/12/2021 | 8.25 | 611.79 |
| | | | | 07/26/2021 | 9.06 | 610.98 |
| | | | | 08/16/2021 | 8.27 | 611.77 |
| | | | | 10/25/2021 | 6.29 | 613.75 |
| G303 | Compliance | 39.05714 | -89.39172 | 08/10/2020 | 6.86 | 615.16 |
| | | | | 01/20/2021 | 5.85 | 616.17 |
| | | | | 03/29/2021 | Not Measured | |
| | | | | 04/20/2021 | 4.75 | 617.27 |
| | | | | 05/03/2021 | 4.00 | 618.02 |
| | | | | 05/17/2021 | 4.65 | 617.37 |
| | | | | 06/09/2021 | 5.50 | 616.52 |
| | | | | 06/23/2021 | 7.10 | 614.92 |
| | | | | 07/12/2021 | 4.87 | 617.15 |

TABLE 1
GROUNDWATER ELEVATIONS
2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
COFFEEN POWER PLANT
101 - ASH POND NO. 1
COFFEEN, IL

| Well ID | Well Type | Latitude (Decimal Degrees) | Longitude (Decimal Degrees) | Date | Depth to Groundwater (ft BMP) | Groundwater Elevation (ft NAVD88) |
|---------|------------|-------------------------------|--------------------------------|------------|----------------------------------|--------------------------------------|
| G303 | Compliance | 39.05714 | -89.39172 | 07/26/2021 | 5.58 | 616.44 |
| | | | | 08/16/2021 | 5.44 | 616.58 |
| | | | | 10/25/2021 | 4.70 | 617.32 |
| G306 | Background | 39.05649 | -89.39356 | 08/10/2020 | 8.65 | 617.26 |
| | | | | 01/20/2021 | 6.74 | 619.17 |
| | | | | 03/29/2021 | 5.49 | 620.42 |
| | | | | 04/20/2021 | 6.61 | 619.30 |
| | | | | 04/21/2021 | 6.38 | 619.53 |
| | | | | 05/03/2021 | 5.95 | 619.96 |
| | | | | 05/17/2021 | 6.47 | 619.44 |
| | | | | 06/09/2021 | 7.87 | 618.04 |
| | | | | 06/15/2021 | 8.62 | 617.29 |
| | | | | 06/23/2021 | 9.59 | 616.32 |
| | | | | 07/12/2021 | 5.32 | 620.59 |
| | | | | 07/26/2021 | 7.07 | 618.84 |
| | | | | 08/16/2021 | 6.99 | 618.92 |
| | | | | 10/25/2021 | 5.85 | 620.06 |
| G307 | Compliance | 39.05721 | -89.39554 | 08/10/2020 | 0.24 | 624.36 |
| | | | | 01/20/2021 | 0.50 | 624.10 |
| | | | | 03/29/2021 | Not Measured | |
| | | | | 04/20/2021 | 0.10 | 624.50 |
| | | | | 05/17/2021 | 0.15 | 624.45 |
| | | | | 06/09/2021 | Not Measured | |
| | | | | 06/23/2021 | Not Measured | |
| | | | | 07/12/2021 | 0.15 | 624.45 |
| | | | | 07/26/2021 | Above Top of Casing | |
| | | | | 08/16/2021 | 0.14 | 624.46 |
| | | | | 10/25/2021 | Not Measured | |

Notes:
ATC = above top of casing (well under pressure)
BMP = below measuring point
ft = foot/feet
NAVD88 = North American Vertical Datum of 1988

TABLE 2
ANALYTICAL RESULTS - APPENDIX III PARAMETERS
 2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 COFFEEN POWER PLANT
 101 - ASH POND NO. 1
 COFFEEN, IL

| Well ID | Well Type | Latitude (Decimal Degrees) | Longitude (Decimal Degrees) | Date | Boron, total (mg/L) | Calcium, total (mg/L) | Chloride, total (mg/L) | Fluoride, total (mg/L) | pH (field) (SU) | Sulfate, total (mg/L) | Total Dissolved Solids (mg/L) |
|---------|------------|-------------------------------|--------------------------------|------------|------------------------|--------------------------|---------------------------|---------------------------|--------------------|--------------------------|----------------------------------|
| G281 | Background | 39.06541 | -89.39932 | 08/12/2020 | 0.037 | 130 | 81 | 0.324 | 6.9 | 260 | 700 |
| | | | | 01/29/2021 | <0.01 | 130 | 100 | 0.314 | 7.1 | 260 | 870 |
| | | | | 08/17/2021 | 0.032 | 140 | 89 | 0.387 | 7.1 | 260 | 910 |
| G301 | Compliance | 39.05951 | -89.39541 | 08/11/2020 | 2.1 | 150 | 14 | 0.263 | 6.6 | 750 | 1200 |
| | | | | 01/27/2021 | 2 | 160 | 17 | <0.25 | 6.6 | 650 | 1300 |
| | | | | 08/17/2021 | 2.2 | 150 | 18 | 0.327 | 6.6 | 810 | 1200 |
| G302 | Compliance | 39.05954 | -89.39319 | 08/11/2020 | 1.2 | 140 | 5.9 | 0.28 | 6.9 | 260 | 780 |
| | | | | 01/27/2021 | 1.2 | 180 | 22 | <0.25 | 6.6 | 430 | 1100 |
| | | | | 08/17/2021 | 1.8 | 200 | 21 | 0.289 | 6.6 | 480 | 1200 |
| G303 | Compliance | 39.05714 | -89.39172 | 08/11/2020 | 1.7 | 210 | 24 | 0.294 | 6.9 | 790 | 1700 |
| | | | | 01/26/2021 | 2 | 170 | 32 | <0.25 | 6.8 | 730 | 1600 |
| | | | | 08/17/2021 | 2.1 | 190 | 30 | 0.298 | 6.8 | 730 | 1700 |
| G306 | Background | 39.05649 | -89.39356 | 08/11/2020 | 2.6 | 140 | 1.5 | <0.25 | 6.9 | 250 | 700 |
| | | | | 01/26/2021 | 2.4 | 110 | 2.1 | <0.25 | 6.8 | 240 | 700 |
| | | | | 08/17/2021 | 3 | 110 | 1.5 | 0.257 | 6.5 | 210 | 640 |
| G307 | Compliance | 39.05721 | -89.39554 | 08/11/2020 | 2.1 | 230 | 15 | 0.414 | 7.3 | 910 | 1200 |
| | | | | 01/27/2021 | 1.9 | 200 | 14 | <0.25 | 7.4 | 850 | 1400 |
| | | | | 08/17/2021 | 2.1 | 210 | 16 | 0.423 | 7.3 | 750 | 1300 |

Notes:
 mg/L = milligrams per liter
 SU = Standard Units
 < = concentration is less than the concentration shown, which corresponds to the reporting limit for the method; estimated concentrations below the reporting limit and associated qualifiers are not provided since they are not utilized in statistics to determine Statistically Significant Increases (SSIs) over background

TABLE 3
ANALYTICAL RESULTS - APPENDIX IV PARAMETERS
2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
COFFEEN POWER PLANT
101 - ASH POND NO. 1
COFFEEN, IL

| Well ID | Well Type | Latitude (Decimal Degrees) | Longitude (Decimal Degrees) | Date | Antimony, total (mg/L) | Arsenic, total (mg/L) | Barium, total (mg/L) | Beryllium, total (mg/L) | Cadmium, total (mg/L) | Chromium, total (mg/L) | Cobalt, total (mg/L) | Fluoride, total (mg/L) | Lead, total (mg/L) | Lithium, total (mg/L) | Mercury, total (mg/L) | Molybdenum, total (mg/L) | Radium 226+228, total (pCi/L) | Selenium, total (mg/L) | Thallium, total (mg/L) |
|---------|------------|----------------------------|-----------------------------|------------|------------------------|-----------------------|----------------------|-------------------------|-----------------------|------------------------|----------------------|------------------------|--------------------|-----------------------|-----------------------|--------------------------|-------------------------------|------------------------|------------------------|
| G281 | Background | 39.06541 | -89.39932 | 08/12/2020 | -- | <0.001 | 0.057 | <0.001 | <0.001 | <0.004 | <0.002 | 0.324 | <0.001 | <0.02 | <0.0002 | <0.001 | 0.304 | <0.001 | -- |
| | | | | 01/29/2021 | <0.003 | <0.001 | 0.064 | <0.001 | <0.001 | <0.004 | <0.002 | 0.314 | <0.001 | <0.02 | <0.0002 | <0.001 | 0.397 | <0.001 | <0.001 |
| | | | | 08/17/2021 | <0.003 | <0.001 | 0.065 | <0.001 | <0.001 | <0.004 | <0.002 | 0.387 | <0.001 | <0.02 | <0.0002 | <0.001 | 0.468 | <0.001 | <0.001 |
| G301 | Compliance | 39.05951 | -89.39541 | 08/11/2020 | -- | <0.001 | 0.016 | <0.001 | <0.001 | <0.004 | <0.002 | 0.263 | <0.001 | <0.02 | -- | <0.001 | 0.781 | <0.001 | -- |
| | | | | 01/27/2021 | <0.003 | <0.001 | 0.017 | <0.001 | <0.001 | <0.004 | <0.002 | <0.25 | <0.001 | <0.02 | <0.0002 | <0.001 | 1.02 | <0.001 | <0.001 |
| | | | | 08/17/2021 | -- | <0.001 | 0.016 | <0.001 | <0.001 | <0.004 | <0.002 | 0.327 | <0.001 | <0.02 | -- | <0.001 | 0.0854 | <0.001 | -- |
| G302 | Compliance | 39.05954 | -89.39319 | 08/11/2020 | -- | 0.001 | 0.022 | <0.001 | <0.001 | <0.004 | <0.002 | 0.28 | <0.001 | <0.02 | -- | <0.001 | 0.652 | <0.001 | -- |
| | | | | 01/27/2021 | <0.003 | <0.001 | 0.027 | <0.001 | <0.001 | <0.004 | <0.002 | <0.25 | <0.001 | <0.02 | <0.0002 | <0.001 | 0.129 | <0.001 | <0.001 |
| | | | | 08/17/2021 | -- | <0.001 | 0.029 | <0.001 | <0.001 | <0.004 | <0.002 | 0.289 | <0.001 | <0.02 | -- | <0.001 | 1.26 | <0.001 | -- |
| G303 | Compliance | 39.05714 | -89.39172 | 08/11/2020 | -- | 0.0041 | 0.033 | <0.001 | <0.001 | 0.0043 | 0.0056 | 0.294 | 0.0037 | 0.041 | -- | 0.0023 | 1.37 | <0.001 | -- |
| | | | | 01/26/2021 | <0.003 | <0.001 | 0.013 | <0.001 | <0.001 | <0.004 | <0.002 | <0.25 | <0.001 | 0.033 | <0.0002 | 0.0016 | 0.355 | <0.001 | <0.001 |
| | | | | 08/17/2021 | -- | 0.003 | 0.017 | <0.001 | <0.001 | <0.004 | 0.0044 | 0.298 | <0.001 | 0.032 | -- | 0.0018 | 0.689 | <0.001 | -- |
| G306 | Background | 39.05649 | -89.39356 | 08/11/2020 | -- | <0.001 | 0.039 | <0.001 | <0.001 | <0.004 | <0.002 | <0.25 | <0.001 | <0.02 | -- | <0.001 | 0.145 | <0.001 | -- |
| | | | | 01/26/2021 | <0.003 | <0.001 | 0.03 | <0.001 | <0.001 | <0.004 | <0.002 | <0.25 | <0.001 | <0.02 | <0.0002 | <0.001 | 0.876 | 0.0012 | <0.001 |
| | | | | 08/17/2021 | -- | <0.001 | 0.03 | <0.001 | <0.001 | <0.004 | <0.002 | 0.257 | <0.001 | <0.02 | -- | <0.001 | 0.811 | <0.001 | -- |
| G307 | Compliance | 39.05721 | -89.39554 | 08/11/2020 | -- | <0.001 | 0.021 | <0.001 | <0.001 | <0.004 | 0.0024 | 0.414 | <0.001 | <0.02 | -- | 0.0013 | 0.593 | <0.001 | -- |
| | | | | 01/27/2021 | <0.003 | <0.001 | 0.02 | <0.001 | <0.001 | <0.004 | 0.0024 | <0.25 | <0.001 | <0.02 | <0.0002 | 0.0012 | 0.616 | <0.001 | <0.001 |
| | | | | 08/17/2021 | -- | <0.001 | 0.03 | <0.001 | 0.0047 | <0.004 | 0.0032 | 0.423 | 0.001 | <0.02 | -- | 0.0012 | 1.42 | <0.001 | -- |

Notes:
mg/L = milligrams per liter
pCi/L = picoCuries per liter
< = concentration is less than the concentration shown, which corresponds to the reporting limit for the method; estimated concentrations below the reporting limit and associated qualifiers are not provided since they are not utilized in statistics to determine Statistically Significant Levels (SSLs) over the groundwater protection standard.
-- = not analyzed

TABLE 4
STATISTICAL BACKGROUND VALUES
2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
COFFEEN POWER PLANT
101 - ASH POND NO. 1
COFFEEN, IL

| Parameter | Statistical Background Value (LPL/UPL) |
|---------------------------------|---|
| 40 C.F.R. Part 257 Appendix III | |
| Boron (mg/L) | 2.90 |
| Calcium (mg/L) | 150 |
| Chloride (mg/L) | 75.0 |
| Fluoride (mg/L) | 0.470 |
| pH (field) (SU) | 6.5/7.1 |
| Sulfate (mg/L) | 700 |
| Total Dissolved Solids (mg/L) | 893 |

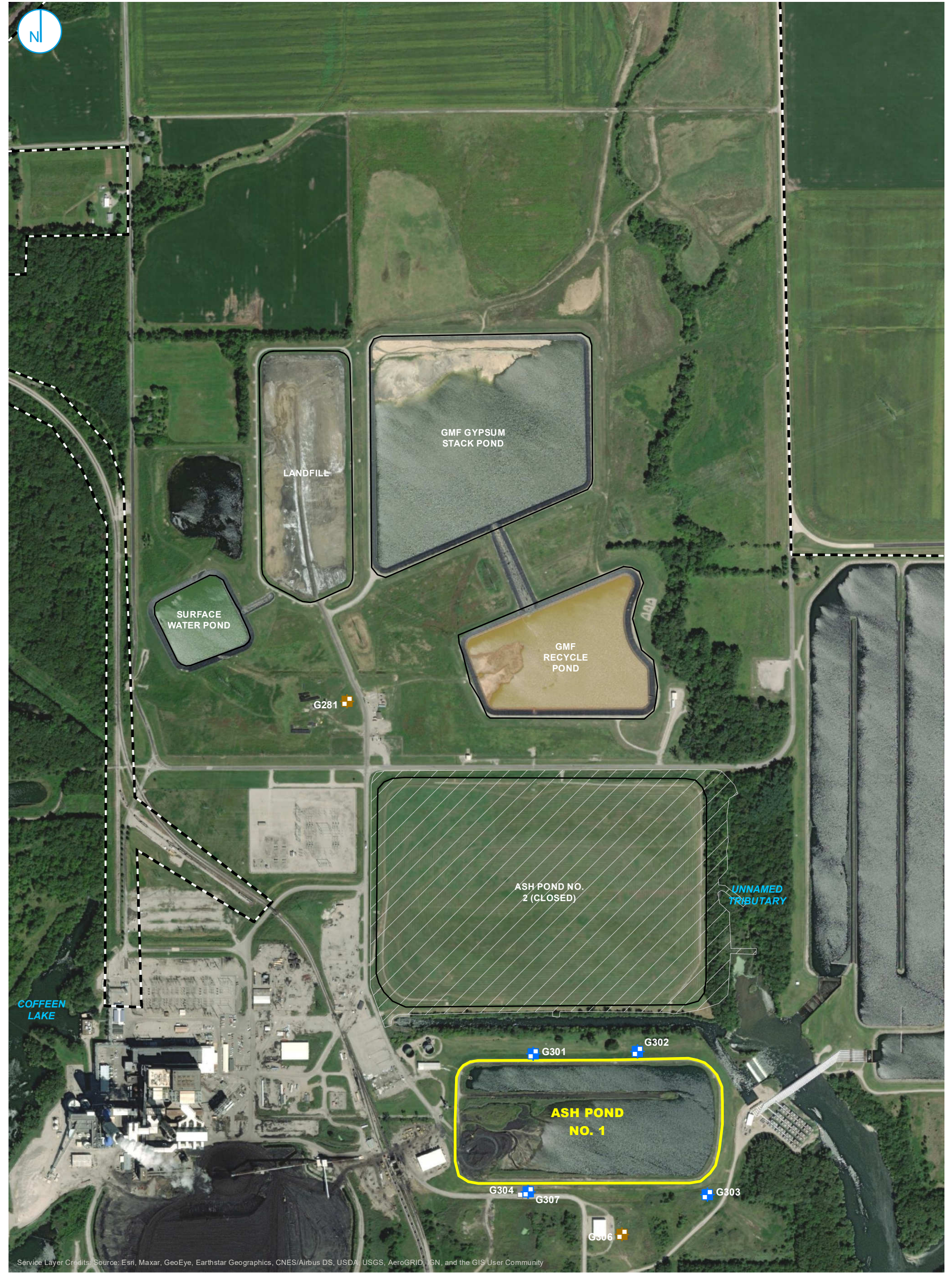
Notes:
40 C.F.R. = Title 40 of the Code of Federal Regulations
LPL = Lower Prediction Limit (applicable for pH only)
mg/L = milligrams per liter
SU = Standard Units
UPL = Upper Prediction Limit

TABLE 5
GROUNDWATER PROTECTION STANDARDS
2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
COFFEEN POWER PLANT
101 - ASH POND NO. 1
COFFEEN, IL

| Parameter | Groundwater Protection Standard* |
|---------------------------------|----------------------------------|
| 40 C.F.R. Part 257 Appendix IV | |
| Antimony (mg/L) | 0.006 |
| Arsenic (mg/L) | 0.010 |
| Barium (mg/L) | 2 |
| Beryllium (mg/L) | 0.004 |
| Cadmium (mg/L) | 0.005 |
| Chromium (mg/L) | 0.1 |
| Cobalt (mg/L) | 0.0064 |
| Fluoride (mg/L) | 4.0 |
| Lead (mg/L) | 0.015 |
| Lithium (mg/L) | 0.04 |
| Mercury (mg/L) | 0.002 |
| Molybdenum (mg/L) | 0.1 |
| Radium-226 + Radium 228 (pCi/L) | 5 |
| Selenium (mg/L) | 0.05 |
| Thallium (mg/L) | 0.002 |

Notes:
* Groundwater Protection Standard is the higher of the Maximum Contaminant Level/Health-Based Level or background.
40 C.F.R. = Title 40 of the Code of Federal Regulations
mg/L = milligrams per liter
pCi/L = picoCuries per liter

FIGURES



Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

- BACKGROUND WELL
- COMPLIANCE WELL
- CLOSED MONITORING WELL
- PART 257 REGULATED UNIT
(SUBJECT UNIT)
- SITE FEATURE
- CAPPED AREA (IEPA APPROVED
CLOSURE)
- PROPERTY BOUNDARY

MONITORING WELL LOCATION MAP

FIGURE 1

0 275 550
Feet

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ASH POND NO. 1
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COFFEEN, ILLINOIS

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.

