Prepared for Kincaid Generation, LLC

Date January 31, 2022

Project No. 1940100711-010

## 2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT ASH POND KINCAID POWER PLANT KINCAID, ILLINOIS CCR UNIT 141



#### 2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT KINCAID POWER PLANT ASH POND

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## **ACRONYMS AND ABBREVIATIONS**

§ 40 C.F.R. AP	Section Title 40 of the Code of Federal Regulations Ash Pond
ASD	Alternate Source Demonstration
CCR	coal combustion residuals
CMA	Corrective Measures Assessment
GWPS	groundwater protection standard
KPP	Kincaid Power Plant
NA	not applicable
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 (AP) located at Kincaid Power Plant (KPP) near Kincaid, Illinois.

Groundwater is being monitored at the AP in accordance with the Assessment Monitoring Program requirements specified in 40 C.F.R. § 257.95. Assessment Monitoring was initiated at the AP 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. Consequently, a Corrective Measures Assessment (CMA) is not required and the AP remains in the Assessment Monitoring Program.

## **1. INTRODUCTION**

This report has been prepared by Ramboll Americas Engineering Solutions, Inc. (Ramboll) on behalf of Kincaid Generation, LLC, to provide the information required by 40 C.F.R. § 257.90(e) for the AP located at the KPP near Kincaid, 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 the AP 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 the AP 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. 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.

Sampling Dates	Analytical Data Receipt Date	Parameters Collected	SSL(s)	SSL(s) Determination Date	ASD Determination Date
August 26, 2020	October 16, 2020	Appendix III			
		Appendix IV Detected <sup>1</sup>	none	January 14, 2021	NA
March 30, 2021	April 27, 2021	Appendix III			
		Appendix IV	none	July 26, 2021	NA
September 1, 2021	September 24, 2021	Appendix III			
		Appendix IV Detected <sup>1</sup>	TBD	December 23, 2021	NA

#### Table A. 2020-2021 Assessment Monitoring Program Summary

#### Notes:

ASD: Alternate Source Demonstration

NA: not applicable

TBD: to be determined

ASD: Alternate Source Demonstration

<sup>1</sup> 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 (NRT/OBG, 2017a), 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 downgradient 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, Kincaid Ash Pond, Kincaid Power Station, Kincaid, Illinois, Project No. 2285, Revision 0, October 17, 2017.

Natural Resource Technology, an OBG Company (NRT/OBG), 2017b, Statistical Analysis Plan, Kincaid Power Station, Kincaid Generation, L.L.C., October 17, 2017.

## **TABLES**

## TABLE 1

**GROUNDWATER ELEVATIONS** 2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT KINCAID POWER PLANT

141 - ASH POND

KINCAID, IL

Well ID	Well Type	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Date	Depth to Groundwater (ft BMP)	Groundwater Elevation (ft NAVD88)
				08/26/2020	15.71	589.00
				12/02/2020	16.49	588.22
				02/23/2021	15.68	589.03
				03/15/2021	15.33	589.38
				03/30/2021	14.23	590.48
				04/05/2021	14.81	589.90
MW-1	Background	39.59205	-89.49028	05/19/2021	12.47	592.24
				06/10/2021	15.11	589.60
				07/01/2021	15.08	589.63
				07/22/2021	15.35	589.36
				08/10/2021	15.08	589.63
				09/01/2021	15.57	589.14
				11/17/2021	15.20	589.51
				08/26/2020	7.67	593.43
				12/02/2020	7.57	593.53
				02/23/2021	6.18	594.92
			-89.48892	03/15/2021	6.07 4.89	595.03 596.21
		39.59070		03/30/2021	6.64	596.21
MW-2	Background			05/19/2021	4.42	594.46
1*1 * 1 * 1 * 1	Dackground	39.39070	-09.40092	06/10/2021	6.98	596.08
				07/01/2021	6.31	594.79
				07/22/2021	7.15	593.95
				08/10/2021	5.40	595.70
				09/01/2021	7.00	594.10
				11/17/2021	7.12	593.98
				08/26/2020	27.62	591.82
				12/02/2020	27.91	591.53
				02/23/2021	25.35	594.09
				03/15/2021	25.08	594.36
				03/30/2021	25.03	594.41
				04/05/2021	25.60	593.84
	Contrallion on	20 601 20	20,40040	05/20/2021	24.87	594.57
MW-5	Compliance	39.60130	-89.49040	06/09/2021	26.29	593.15
				07/01/2021	25.50	593.94
				07/22/2021	26.35	593.09
				08/10/2021	24.78	594.66
				09/01/2021	26.31	593.13
				11/17/2021	25.83	593.61
				12/30/2099	19.99	599.45
				08/26/2020	10.06	590.40
				12/02/2020	11.82	588.64
MW-6	Compliance	39 59864	-89.49894	02/23/2021	8.45	592.01
	Compliance	39.59864		03/15/2021	8.19	592.27
				03/30/2021	5.50	594.96
				04/05/2021	6.75	593.71



#### TABLE 1 GROUNDWATER ELEVATIONS

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT KINCAID POWER PLANT

141 - ASH POND

KINCAID, IL

Well ID	Well Type	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Date	Depth to Groundwater (ft BMP)	Groundwater Elevation (ft NAVD88)
				05/21/2021	5.20	595.26
				06/10/2021	8.88	591.58
				07/01/2021	10.03	590.43
MW-6	Compliance	39.59864	-89.49894	07/22/2021	8.64	591.82
				08/10/2021	7.79	592.67
				09/01/2021	9.19	591.27
				11/17/2021	9.38	591.08
				08/26/2020	10.05	587.70
				12/02/2020	11.18	586.57
				02/23/2021	8.30	589.45
				03/15/2021	2.89	594.86
				03/30/2021	6.79	590.96
				04/05/2021	9.11	588.64
MW-7	Compliance	39.59764	-89.49896	05/21/2021	6.20	591.55
				06/10/2021	10.89	586.86
				07/01/2021	5.21	592.54
				07/22/2021	10.02	587.73
				08/10/2021	2.35	595.40
				09/01/2021	3.82	593.93
				11/17/2021	8.85	588.90
			-89.49683	08/26/2020	9.84	593.30
				12/02/2020	9.24	593.90
		39.59440		02/23/2021	7.60	595.54
				03/15/2021	7.17	595.97
				03/30/2021	6.01	597.13
				04/05/2021	8.44	594.70
MW-8	Compliance			05/21/2021	5.81	597.33
				06/10/2021	9.29	593.85
				07/01/2021	4.64	598.50
				07/22/2021	8.99	594.15
				08/10/2021	7.04	596.10
				09/01/2021	8.23	594.91
				11/17/2021	9.27	593.87
				08/26/2020	11.76	590.05
				12/02/2020	11.76	590.05
				02/23/2021	11.60	590.21
				03/15/2021	11.28	590.53
				03/30/2021	11.45	590.36
				04/05/2021	11.59	590.22
MW-11	Compliance	39.59310	-89.49111	05/18/2021	10.15	591.66
				06/09/2021	11.69	590.12
				07/01/2021	11.60	590.21
				07/22/2021	11.75	590.06
				08/10/2021	11.49	590.32
				09/01/2021	11.60	590.21
				11/17/2021	11.74	590.07



#### TABLE 1 **GROUNDWATER ELEVATIONS**

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT KINCAID POWER PLANT

141 - ASH POND

KINCAID, IL

Well ID	Well Type	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Date	Depth to Groundwater (ft BMP)	Groundwater Elevation (ft NAVD88)						
				08/26/2020	6.79	584.65						
										12/02/2020	7.63	583.81
								02/23/2021	7.28	584.12		
				03/15/2021	6.70	584.70						
		39.60021	-89.49638	-89.49638	03/30/2021	5.75	585.65					
					04/05/2021	6.30	585.10					
MW-12	Compliance				-89.49638	-89.49638	-89.49638	-89.49638	-89.49638	-89.49638	-89.49638 05/20/2021 4.81	4.81
				06/10/2021	6.38	585.02						
				07/01/2021	5.99	585.41						
				07/22/2021	6.42	584.98						
							08/10/2021	6.35	585.05			
								09/01/2021	6.38	585.02		
				11/17/2021	6.41	584.99						

Notes:

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 KINCAID POWER PLANT 141 - ASH POND

KINCAID, 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)
				08/26/2020	0.252	57.5	7	0.23	6.6	93	300
MW-1	Background	39.59205	-89.49028	03/30/2021	0.204	57.8	6	0.18	6.5	84	298
				09/01/2021	0.301	55.2	9	0.19	6.5	85	302
				08/26/2020	0.0576	96.6	17	0.55	7.3	139	442
MW-2	Background	39.59070	-89.48892	03/30/2021	0.0609	96.2	16	0.47	7.1	129	458
				09/01/2021	0.128	93.4	15	0.42	7.0	133	476
				08/26/2020	0.507	146	45	<0.2	6.7	14	622
MW-5	Compliance	39.60130	-89.49040	03/30/2021	0.555	150	43	0.18	6.5	13	666
				09/01/2021	0.625	143	47	0.16	6.6	<10	652
			-89.49894	08/26/2020	1.09	103	<5	0.24	6.6	157	476
MW-6	Compliance	39.59864		03/30/2021	0.64	75.6	<5	0.21	6.6	98	368
				09/01/2021	1.28	93.5	4	0.19	6.4	173	498
		39.59764		08/26/2020	0.33	104	<5	0.36	7.1	160	494
MW-7	Compliance		-89.49896	03/30/2021	0.126	104	<5	0.23	7.1	132	476
				09/01/2021	0.604	198	3	0.26	6.6	317	970
				08/26/2020	0.918	154	17	0.21	6.7	289	836
MW-8	Compliance	39.59440	-89.49683	03/30/2021	0.865	159	15	0.26	6.6	260	800
				09/01/2021	0.986	149	21	0.21	6.5	267	794
				08/26/2020	1.55	120	35	0.59	6.9	107	554
MW-11	Compliance	39.59310	-89.49111	03/30/2021	1.34	118	36	0.51	6.9	96	578
				09/01/2021	1.56	115	38	0.48	6.7	110	584
				08/26/2020	3.76	211	31	0.22	6.6	424	1100
MW-12	Compliance	39.60021	-89.49638	03/30/2021	1.97	181	17	0.18	6.5	295	908
				09/01/2021	2.78	197	40	0.22	6.7	332	1050

#### 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</p>



#### TABLE 3 ANALYTICAL RESULTS - APPENDIX IV PARAMETERS

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT KINCAID POWER PLANT 141 - ASH POND

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)
				08/26/2020	<0.001	<0.001	0.0463	<0.001		<0.0015	<0.001	0.23	<0.001	<0.003		<0.0015	2.55	<0.001	
MW-1	Background	39.59205	-89.49028	03/30/2021	<0.001	<0.001	0.0445	<0.001	<0.001	<0.0015	<0.001	0.18	<0.001	<0.003	<0.0002	<0.0015	0	<0.001	<0.002
				09/01/2021	<0.001	<0.001	0.0466	<0.001	<0.001	<0.0015	<0.001	0.19	<0.001	<0.003	<0.0002	<0.0015	0.456	<0.001	<0.002
				08/26/2020	<0.001	<0.001	0.106	<0.001		<0.0015	<0.001	0.55	<0.001	0.0051		0.0047	0.92	<0.001	
MW-2	Background	39.59070	-89.48892	03/30/2021	<0.001	0.0013	0.113	<0.001	<0.001	<0.0015	<0.001	0.47	<0.001	0.005	<0.0002	0.0036	0.662	<0.001	<0.002
				09/01/2021	<0.001	0.0014	0.101	<0.001	<0.001	<0.0015	<0.001	0.42	<0.001	0.004	<0.0002	0.0034	0.725	<0.001	<0.002
				08/26/2020	<0.001	<0.001	0.151	<0.001		<0.0015	<0.001	<0.2	<0.001	<0.003		<0.0015	0.94	<0.001	
MW-5	Compliance	39.60130	-89.49040	03/30/2021	<0.001	<0.001	0.154	<0.001	<0.001	<0.0015	<0.001	0.18	<0.001	<0.003	<0.0002	<0.0015	0	<0.001	<0.002
				09/01/2021	<0.001	0.0014	0.144	<0.001	<0.001	<0.0015	<0.001	0.16	<0.001	0.0031	<0.0002	<0.0015	0.0861	<0.001	<0.002
				08/26/2020	<0.001	<0.001	0.0425	<0.001		<0.0015	<0.001	0.24	<0.001	<0.003		<0.0015	1.02	<0.001	
MW-6	Compliance	39.59864	-89.49894	03/30/2021	<0.001	<0.001	0.0293	<0.001	<0.001	<0.0015	<0.001	0.21	<0.001	<0.003	<0.0002	<0.0015	0.0547	<0.001	<0.002
				09/01/2021	<0.001	<0.001	0.0405	<0.001	<0.001	<0.0015	<0.001	0.19	<0.001	<0.003	<0.0002	<0.0015	1.17	<0.001	<0.002
				08/26/2020	<0.001	<0.001	0.0437	<0.001		<0.0015	<0.001	0.36	<0.001	<0.003		0.0029	1.66	<0.001	
MW-7	Compliance	39.59764	-89.49896	03/30/2021	<0.001	<0.001	0.0522	<0.001	<0.001	<0.0015	<0.001	0.23	<0.001	<0.003	<0.0002	0.0026	0.109	<0.001	<0.002
				09/01/2021	<0.001	0.0014	0.0909	<0.001	<0.001	<0.0015	0.0017	0.26	<0.001	0.0043	<0.0002	0.0031	1.83	<0.001	<0.002
				08/26/2020	<0.001	<0.001	0.0306	<0.001		<0.0015	0.0013	0.21	<0.001	<0.003		<0.0015	0.6	<0.001	
MW-8	Compliance	39.59440	-89.49683	03/30/2021	<0.001	<0.001	0.0237	<0.001	<0.001	<0.0015	0.0013	0.26	<0.001	<0.003	<0.0002	<0.0015	0.217	<0.001	<0.002
				09/01/2021	<0.001	<0.001	0.027	<0.001	<0.001	<0.0015	0.0013	0.21	<0.001	<0.003	<0.0002	<0.0015	0.604	<0.001	<0.002
				08/26/2020	<0.001	0.0013	0.129	<0.001		<0.0015	<0.001	0.59	<0.001	<0.003		0.0021	1.08	0.0016	
MW-11	Compliance	39.59310	-89.49111	03/30/2021	<0.001	0.0021	0.129	<0.001	<0.001	<0.0015	<0.001	0.51	<0.001	<0.003	<0.0002	0.0021	0.97	<0.001	<0.002
				09/01/2021	<0.001	0.0013	0.127	<0.001	<0.001	<0.0015	< 0.001	0.48	< 0.001	< 0.003	<0.0002	0.0022	1.31	< 0.001	<0.002
				08/26/2020	<0.001	<0.001	0.0734	<0.001		<0.0015	< 0.001	0.22	< 0.001	0.0079		< 0.0015	4.2	<0.001	
MW-12	Compliance	39.60021	-89.49638	03/30/2021	<0.001	0.0013	0.0848	<0.001	<0.001	<0.0015	< 0.001	0.18	< 0.001	0.0069	<0.0002	< 0.0015	0.429	0.0019	<0.002
		57.00022				0.0010	0.0802					0.22		0.0096			1.97	0.0022	<0.002

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 instatistics 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 KINCAID POWER PLANT 141 - ASH POND KINCAID, IL

Parameter	Statistical Background Value (LPL/UPL)							
40 C.F.R. Part 257 Appendix III								
Boron (mg/L)	0.273							
Calcium (mg/L)	105							
Chloride (mg/L)	18.0							
Fluoride (mg/L)	0.470							
pH (field) (STD)	6.3/7.7							
Sulfate (mg/L)	202							
Total Dissolved Solids (mg/L)	685							

**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 KINCAID POWER PLANT 141 - ASH POND

KINCAID, IL

Parameter	Groundwater Protection Standard*					
40 C.F.R. Par	t 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)	0.006					
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**



223 PROPERTY BOUNDARY

2021 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT



## FIGURE 1

RAMBOLL AMERICAS ENGINEERING SOLUTIONS, INC.



## MONITORING WELL LOCATION MAP

ASH POND KINCAID POWER PLANT KINCAID, ILLINOIS