

January 31, 2019

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Re: **2018 CCR Annual Groundwater Monitoring and
Corrective Action Report**
Indianapolis Power & Light Company
Petersburg Generating Station – Ash Pond System
Indianapolis, Indiana
ATC Project No. 170LF00520

Dear Mr. Heger:

ATC Group Services LLC (ATC) has prepared this 2018 CCR Annual Groundwater Monitoring and Corrective Action Report for the ash pond system at Indianapolis Power & Light Company's (IPL) Petersburg Generating Station located outside Petersburg, Pike County, Indiana. This report has been prepared to comply with reporting requirements described in the United States Environmental Protection Agency's (USEPA) Coal Combustion Residuals (CCR) Rule § 257.90(e). This annual report documents the status of the groundwater monitoring and corrective action program for the ash pond system and summarizes information required by § 257.90(e)(1) through § 257.90(e)(5).

Federal CCR Rule § 257.90(e) specifies the following:

For existing CCR landfills and existing CCR surface impoundments, no later than January 31, 2018, and annually thereafter, the owner or operator must prepare an annual groundwater monitoring and corrective action report. For new CCR landfills, new CCR surface impoundments, and all lateral expansions of CCR units, the owner or operator must prepare the initial annual groundwater monitoring and corrective action report no later than January 31 of the year following the calendar year a groundwater monitoring system has been established for such CCR unit as required by this subpart, and annually thereafter. For the preceding calendar year, the annual report must document the status of the groundwater monitoring and corrective action program for the CCR unit, summarize key actions completed, describe any problems

encountered, discuss actions to resolve the problems, and project key activities for the upcoming year. For purposes of this section, the owner or operator has prepared the annual report when the report is placed in the facility's operating record as required by § 257.105(h)(1).

The following key actions have been completed to comply with the CCR Rule:

- Appendix III groundwater monitoring data was evaluated for statistically significant exceedances (SSIs) pursuant to § 257.93(h) and 257.94(e).
- A Notice of Establishment of an Assessment Monitoring Program was completed as required by § 257.94(e)(3), effective July 16, 2018.
- Assessment monitoring sampling events were conducted in May and September-October 2018 as required by § 257.95. Appendix III constituents were included as part of the May 2018 sampling event during the transition period from detection monitoring to assessment monitoring.
- Groundwater Protection Standards were established in accordance with 40 CFR 257.95(d)(2) and 257.95(h) (Table 4).

To report on the activities conducted during the prior calendar year and document compliance with the CCR Rule, the specific requirements listed in § 257.90(e)(1) through § 257.90(e)(5) are provided below in bold/italic type followed by a short narrative addressing how that specific requirement has been met.

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

§ 257.90(e)(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;

IPL operates the Petersburg Station located approximately four miles north of Petersburg, Indiana. It is located at 6925 North State Road 57, Petersburg, Indiana. A Site Location Map is provided as Figure 1. A map showing the location of each CCR management unit and associated upgradient and downgradient monitoring wells is provided as Figure 2. This information was previously presented in the Indianapolis Power & Light Company Petersburg Generating Station Ash Pond System Closure & Post-Closure Plan, dated August 4, 2014. The Ash Pond System Closure & Post-Closure Plan was approved in a December 31, 2014 IDEM letter.

§ 257.90(e)(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;

No monitoring wells were installed or decommissioned during this reporting period. The CCR groundwater monitoring system at the Petersburg Ash Pond System consists of seventeen (17) monitoring wells; three (3) upgradient wells MW-2R, MW-3, and MW-4C and fourteen (14)

downgradient monitoring wells; AP-1R, AP-2A, AP-2BO, AP-3, AP-3A, AP-4A, AP-4B, AP-4I, AP-5, AP-5A, AP-6A, AP-6B, AP-7, and AP-8. Nested groundwater monitoring wells are installed in four (4) downgradient locations (AP-3/3A, AP-4A/I/B, AP-5/5A, and AP-6A/B). Monitoring wells MW-2R, MW-3, and MW-4C also serve as downgradient monitoring wells for the Petersburg RWS Type III Landfill. The wells were installed between 1986 and 2017 and are installed in unconsolidated deposits overlying bedrock. The location of the CCR monitoring well network is depicted on Figure 2.

Documentation of the design and construction of the monitoring well network for the CCR ash pond system management units at the Petersburg Station is included in the Indianapolis Power & Light Company Petersburg Generating Station Ash Pond System Closure & Post-Closure Plan, dated August 4, 2014. In April 2016, monitoring well AP-1 was abandoned and replaced with AP-1R. Documentation of the well abandonment/installation was provided in the Monitoring Well AP-1R Installation and Abandonment of Monitoring Well AP-1 Report dated May 19, 2016. Additionally, monitoring well AP-2BO was installed in April 2016 as part of an ongoing arsenic investigation in the vicinity of AP-2A and AP-2B. Documentation of the well installation was provided in the Monitoring Well AP-2BO Installation Report dated May 19, 2016. AP-2BO now serves as a replacement to monitoring well AP-2B, which was abandoned in September 2016. Documentation of the well abandonment was provided in the Monitoring Well AP-2B Abandonment Report dated October 17, 2016.

§ 257.90(e)(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;

Table 1 provides a summary of the number of samples collected at each well, sampling dates, and designation of whether samples were required by the detection or assessment monitoring program. Groundwater analytical results for samples collected during the 2018 sampling events are summarized in Table 2 and Table 3.

§ 257.90(e)(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 levels);

Consistent with § 257.90(e), this annual report documents activities conducted during the 2018 calendar year at the CCR management units subject to the Rule.

Pursuant to 257.93(h) and 257.94(e), the statistical analysis of the initial minimum eight rounds of Appendix III groundwater sampling data was completed in January 2018. Based on the analysis, SSIs over background were detected as follows:

- Boron, total
- pH

Pursuant to 40 CFR 257.94(e)(2), an Alternative Source Demonstration was initiated to evaluate whether a source other than the facility was causing the SSIs; however, a successful demonstration was not completed.

Pursuant to 40 CFR 257.94(e)(2), 257.94(e)(3) and 257.95(b), the facility established an Assessment Monitoring Program in accordance with the requirements of § 257.95 on July 16, 2018.

§ 257.90(e)(5) Other information required to be included in the annual report as specified in § 257.90 through § 257.98.

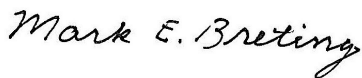
In accordance with §257.95(b), Appendix IV assessment monitoring was completed in May 2018. In accordance with §257.95(d), a resampling assessment monitoring event was completed in September 2018. Sampling was delayed in September due to flooding along the White River, causing several wells near the flood plain to become inaccessible. The sampling event was completed at the earliest opportunity after floodwaters receded. Analytical results are summarized in Tables 2 and 3. Table 4 summarizes the groundwater protection standards established in accordance with § 257.95(d)(2) and § 257.95(h). Background analytical data was previously provided in the CCR Annual Groundwater Monitoring and Corrective Action Report dated January 31, 2018.

Projected key activities for the upcoming year include the following:

- Completion of statistical evaluation to determine whether there is a statistically significant exceedance of groundwater protection standards for Appendix IV constituents in accordance with § 257.95(g) and 257.93(h).
- Annual and semi-annual assessment monitoring sampling events.

We appreciate the opportunity to assist with IPL's CCR Rule groundwater monitoring program at Petersburg Station's ash pond system. Please contact either of the undersigned at 317.849.4990 if you have any questions regarding this report.

Sincerely,



Mark E. Breting, L.P.G.
Senior Project Geologist



John R. Noel, L.P.G.
Principal Geologist

Copies: Ms. Nysa Hogue
Mr. Irwin Leidolf

TABLES

Table 1:	Well Sampling Summary
Table 2:	Summary of Monitoring Results – May 2018
Table 3:	Summary of Monitoring Results – September 2018
Table 4:	Groundwater Protection Standards Summary

Table 1
Well Sampling Summary
Multiunit Ash Pond System
Indianapolis Power and Light Company
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF00520

Identification	Date Installed	Upgradient, Background, or Downgradient	Number of Samples	Sample Date	Detection or Assessment Monitoring
AP-1R	4/5/2016	Downgradient	2	5/9/2018	Assessment
				9/30/2018	
AP-2BO	4/5/2016	Downgradient	2	5/9/2018	Assessment
				9/30/2018	
AP-3	6/9/2014	Downgradient	2	5/8/2018	Assessment
				9/30/2018	
AP-4B	6/17/2014	Downgradient	2	5/8/2018	Assessment
				9/30/2018	
AP-4I	6/16/2014	Downgradient	2	5/8/2018	Assessment
				10/1/2018	
AP-5	6/17/2014	Downgradient	2	5/8/2018	Assessment
				10/1/2018	
AP-6B	6/18/2014	Downgradient	2	5/8/2018	Assessment
				10/1/2018	
AP-7	6/10/2014	Downgradient	2	5/9/2018	Assessment
				9/30/2018	
AP-8	6/10/2014	Downgradient	2	5/9/2018	Assessment
				9/30/2018	
AP-2A	6/11/2014	Downgradient	2	5/9/2018	Assessment
				9/30/2018	
AP-3A	5/13/2015	Downgradient	2	5/8/2018	Assessment
				9/30/2018	
AP-4A	6/16/2014	Downgradient	2	5/8/2018	Assessment
				10/1/2018	
AP-5A	5/12/2015	Downgradient	2	5/8/2018	Assessment
				10/1/2018	
AP-6A	6/17/2014	Downgradient	2	5/8/2018	Assessment
				10/1/2018	
MW-2 (2R)	MW-2 - 1986 MW-2R - 2/1/2017	Upgradient	3	5/9/2018	Assessment
				9/12/2018	
MW-3	1986	Upgradient	2	5/9/2018	Assessment
				9/12/2018	
MW-4C	9/29/1992	Upgradient	2	5/9/2018	Assessment
				9/12/2018	

Table 2
Summary of Monitoring Results - May 2018
Multiunit Ash Pond System
Indianapolis Power and Light Company
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF00520

Well ID		AP-1R	AP-2A	AP-2BO	AP-3	AP-3A	AP-4A	AP-4I	AP-4B	AP-5	AP-5A	AP-6A	AP-6B	AP-7
Microbac Lab ID		L8E0717-01	L8E0717-02	L8E0717-03	L8E0717-04	L8E0717-05	L8E0717-06	L8E0717-07	L8E0717-08	L8E0717-09	L8E0717-10	L8E0717-11	L8E0717-12	L8E0717-13
Sample Date		5/9/2018	5/9/2018	5/9/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/8/2018	5/9/2018
Static Water Elevation (ft MSL)		413.37	410.82	410.94	411.74	410.92	411.13	411.16	411.14	410.94	411.03	411.33	411.41	423.32
Field Parameters														
Temperature	°C	19.48	17.61	18.35	16.67	18.66	17.56	16.94	15.66	16.11	19.29	18.82	14.60	15.28
Dissolved Oxygen, Field	mg/L	0.17	0.14	0.46	0.28	0.07	0.08	0.07	1.99	0.11	1.51	1.72	2.50	0.08
Conductivity, Field	µS/cm	2237.91	2636.27	2692.38	2668.60	2727.03	2914.00	2752.65	1796.03	2634.81	2607.14	2479.24	1327.08	1421.07
ORP, Field	mV	-129.60	-156.93	64.09	21.45	-106.51	-72.08	-1.88	27.20	41.75	-35.55	-27.05	37.95	-50.78
pH, Field	Std. Units	7.18	7.33	7.06	6.98	7.13	6.99	7.06	6.84	7.06	6.82	6.75	6.96	6.64
Analytical Data														
Antimony, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic, Total	mg/L	<0.0050	0.052	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Barium, Total	mg/L	0.05	0.036	0.018	0.013	0.026	0.024	0.020	0.081	0.038	<0.010	0.024	0.024	0.056
Beryllium, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Boron, Total	mg/L	12	21	21	<10	27	20	15	3.7	13	16	13	1.1	<0.50
Cadmium, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Calcium, Total	mg/L	520	640	670	560	660	620	620	350	640	640	490	220	240
Chromium, Total	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cobalt, Total	mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead, Total	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Lithium, Total	mg/L	<0.10	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Mercury, Total	mg/L	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Molybdenum, Total	mg/L	<0.10	2.1	0.49	<0.10	0.96	0.18	<0.10	<0.10	0.13	0.17	<0.10	<0.10	<0.10
Selenium, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0091	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Thallium, Total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Radium-Combined	pCi/L	2.33	4.34	2.7	2.06	2.58	<1	1.36	<1	1.1	1.11	<1	1.33	4.56
Chloride	mg/L	58	86	54	56	83	65	51	26	36	31	23	6.1	<5.0
Fluoride	mg/L	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
pH	SU	7.07	6.88	7.12	6.93	6.93	6.88	7.12	6.79	7.16	6.81	6.85	6.61	6.30
Solids, Dissolved	mg/L	1900	2600	2600	2500	2700	2800	2700	1600	2600	2700	2500	1000	940
Sulfate	mg/L	810	710	800	560	870	900	1000	550	860	950	980	230	240

Notes:
ft MSL: Elevation, feet mean sea level
°C: Degrees celcius
uS/cm: microsiemen per centimeter
umhos/cm: micromhos per centimeter
mV: millivolt
Std. Units: standard units
mg/L: milligram per liter
ug/L: microgram per liter
pCi/L: picoCurie per liter
Static water elevation listed for a well may have been collected on a date different than date of well sampling.

Table 2
Summary of Monitoring Results - May 2018
Multiunit Ash Pond System
Indianapolis Power and Light Company
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF00520

Well ID	AP-8	MW-2R	MW-3	MW-4C
Microbac Lab ID	L8E0717-14	L8E0723-01	L8E0723-02	L8E0723-03
Sample Date	5/9/2018	5/9/2018	5/9/2018	5/9/2018
Static Water Elevation (ft MSL)	440.32	442.44	435.43	447.49
Field Parameters				
Temperature	12.77	16.47	16.45	15.29
Dissolved Oxygen, Field	0.04	0.17	0.17	0.42
Conductivity, Field	1178.40	2635.52	2895.14	2717.28
ORP, Field	67.50	-76.34	23.83	24.27
pH, Field	5.63	7.00	7.09	7.36
Analytical Data				
Antimony, Total	<0.0050	<0.0050	<0.0050	<0.0050
Arsenic, Total	0.0081	0.031	<0.0050	<0.0050
Barium, Total	0.012	0.073	0.038	0.014
Beryllium, Total	<0.0050	<0.0050	<0.0050	<0.0050
Boron, Total	0.94	2.2	1.2	4.7
Cadmium, Total	0.0063	<0.0050	<0.0050	<0.0050
Calcium, Total	140	450	470	570
Chromium, Total	<0.010	<0.010	<0.010	<0.010
Cobalt, Total	0.26	<0.020	<0.020	<0.020
Lead, Total	<0.010	<0.010	<0.010	<0.010
Lithium, Total	<0.10	0.96	2.6	0.25
Mercury, Total	<0.00020	<0.00020	<0.00020	<0.00020
Molybdenum, Total	<0.10	<0.10	0.39	<0.10
Selenium, Total	<0.0050	<0.0050	<0.0050	<0.0050
Thallium, Total	<0.0010	<0.0010	<0.0010	<0.0010
Radium-Combined	2.01	2.2	2.07	<1.0
Chloride	7.6	30	48	30
Fluoride	<5.0	<5.0	<5.0	<5.0
pH	5.27	6.73	7.23	6.91
Solids, Dissolved	1000	2400	2700	2600
Sulfate	360	870	800	880

Notes:
ft MSL: Elevation, feet mean sea level
°C: Degrees celcius
uS/cm: microsiemen per centimet
umhos/cm: micromhos per centimeter
mV: millivolt
Std. Units: standard units
mg/L: milligram per liter
ug/L: microgram per liter
pCi/L: picoCurie per liter
Static water elevation listed for a well that has not
been collected on a date different from the date of the
well sampling.

Table 3
Summary of Monitoring Results - September 2018
Multiunit Ash Pond System
Indianapolis Power and Light Company
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF00520

Well ID		AP-1R	AP-2A	AP-2BO	AP-3	AP-3A	AP-4A	AP-4I	AP-4B	AP-5	AP-5A	AP-6A	AP-6B
Microbac Lab ID		L8J0131-01	L8J0131-02	L8J0131-03	L8J0131-04	L8J0131-05	L8J0131-06	L8J0131-07	L8J0131-08	L8J0131-09	L8J0131-10	L8J0131-11	L8J0131-12
Sample Date		9/30/2018	9/30/2018	9/30/2018	9/30/2018	9/30/2018	10/1/2018	10/1/2018	9/30/2018	10/1/2018	10/1/2018	10/1/2018	10/1/2018
Static Water Elevation (ft MSL)		411.81	409.65	409.8	410.54	409.75	409.87	409.91	409.87	409.91	410.04	410.17	410.25
Field Parameters													
Temperature, Field	°C	17.39	18.21	19.36	19.04	21.71	19.33	17.16	17.70	18.33	19.33	19.32	18.63
Dissolved Oxygen, Field	mg/L	0.14	0.38	0.65	0.20	0.25	0.26	0.22	0.80	0.70	0.27	0.37	0.71
Conductivity, Field	µS/cm	1891.78	2352.15	2487.05	2442.74	2696.59	2667.24	2429.65	1727.29	2462.30	2403.35	2331.07	1285.06
ORP, Field	mV	-118.99	-113.27	6.22	73.02	-79.25	-63.98	-37.75	73.91	47.57	-80.64	-74.89	59.65
pH, Field	Std. Units	7.06	7.38	7.54	6.96	7.01	6.90	6.93	6.65	7.15	6.98	6.97	6.85
Analytical Data													
Antimony, Total	mg/L	<0.0014	<0.0014	<0.0050	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
Arsenic, Total	mg/L	<0.0050	0.044	<0.0050	<0.0012	<0.0050	<0.0012	<0.0012	<0.0012	<0.0012	<0.0050	<0.0050	<0.0012
Barium, Total	mg/L	0.049	0.039	0.020	0.020	0.035	0.029	0.021	0.044	0.022	0.019	0.024	0.029
Beryllium, Total	mg/L	<0.00065	<0.00065	<0.00065	<0.00065	<0.00065	<0.00065	<0.00065	<0.00065	<0.00065	<0.00065	<0.00065	<0.00065
Boron, Total	mg/L	11	21	24	9.9	28	22	16	3.7	13	17	13	1.4
Cadmium, Total	mg/L	<0.00055	<0.00055	<0.00055	<0.00055	<0.00055	<0.00055	<0.00055	<0.00055	<0.00055	<0.00055	<0.00055	<0.00055
Calcium, Total	mg/L	430	600	630	550	670	590	610	360	630	590	470	230
Cobalt, Total	mg/L	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036	<0.0036
Lithium, Total	mg/L	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Molybdenum, Total	mg/L	<0.10	2.3	0.44	<0.10	0.63	0.22	0.12	<0.10	0.17	0.19	<0.10	<0.10
Selenium, Total	mg/L	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	0.0062	<0.00090	<0.00090	<0.00090	<0.00090
Thallium, Total	mg/L	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060
Radium-Combined	pCi/L	<1.0	1.2	<1.0	<1.0	1.15	1.89	1.57	<1.0	<1.0	<1.0	<1.0	<1.0
Chloride	mg/L	54	84	90	50	120	95	61	24	52	36	26	7.6
Fluoride	mg/L	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60
pH	SU	6.80	6.94	7.21	7.07	6.93	6.88	7.00	6.59	7.08	6.80	6.86	6.70
Solids, Dissolved	mg/L	1900	2600	2600	2800	46	2700	2900	2900	1700	2800	2600	2600
Sulfate	mg/L	700	1100	1100	970	1200	1100	1200	620	1100	1200	1100	380

Notes:
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Static water elevation listed for a well may have been collected on a date different than date of well sampling.

Table 3
Summary of Monitoring Results - September 2018
Multiunit Ash Pond System
Indianapolis Power and Light Company
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF00520

Well ID		AP-7	AP-8	MW-2R	MW-3	MW-4C
Microbac Lab ID		L8J0131-13	L8J0131-14	L8I0802-01	L8I0802-02	L8I0802-03
Sample Date		9/30/2018	9/30/2018	9/12/2018	9/12/2018	9/12/2018
Static Water Elevation (ft MSL)		429.52	432.2	437.68	440.46	448.64
Field Parameters						
Temperature, Field	°C	17.39	17.80	19.42	19.42	16.08
Dissolved Oxygen, Field	mg/L	0.30	0.09	0.29	0.16	0.11
Conductivity, Field	µS/cm	1235.57	1093.74	2370.99	2616.14	2329.47
ORP, Field	mV	-50.91	104.07	-62.19	38.91	81.22
pH, Field	Std. Units	6.54	5.13	6.81	7.18	6.90
Analytical Data						
Antimony, Total	mg/L	<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
Arsenic, Total	mg/L	<0.0012	0.0058	0.011	<0.0050	<0.0012
Barium, Total	mg/L	0.048	0.013	0.044	0.045	0.029
Beryllium, Total	mg/L	<0.00065	0.0035	<0.00065	<0.00065	<0.00065
Boron, Total	mg/L	<0.50	1.1	2.3	1.0	4.7
Cadmium, Total	mg/L	<0.00055	0.014	<0.00055	<0.00055	<0.00055
Calcium, Total	mg/L	230	140	430	390	520
Cobalt, Total	mg/L	<0.0036	0.45	<0.0036	<0.0036	<0.0036
Lithium, Total	mg/L	<0.10	<0.10	0.80	2.6	0.28
Molybdenum, Total	mg/L	<0.10	<0.10	<0.10	0.52	<0.10
Selenium, Total	mg/L	<0.00090	<0.00090	<0.0050	<0.0050	<0.0050
Thallium, Total	mg/L	<0.00060	<0.00060	0.0023	<0.00060	<0.00060
Radium-Combined	pCi/L	1.80	1.50	<1.0	<1.0	<1.0
Chloride	mg/L	8.1	<5.0	46	74	32
Fluoride	mg/L	<0.60	<0.60	<0.60	<0.60	<0.60
pH	SU	5.28	6.54	6.61	7.13	6.73
Solids, Dissolved	mg/L	1400	1200	2300	2500	2700
Sulfate	mg/L	520	270	970	1100	980

Notes:

ft MSL: Elevation, feet mean sea level

°C: Degrees celcius

uS/cm: microsiemen per centimeter

umhos/cm: micromhos per centimeter

mV: millivolt

Std. Units: standard units

mg/L: milligram per liter

ug/L: microgram per liter

pCi/L: picoCurie per liter

Static water elevation listed for a well may have been collected on a date different than date of well sampling.

Table 4
Groundwater Protection Standards
Multiunit Ash Pond System
Indianapolis Power and Light Company
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF00520

Parameter	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium	Cobalt	Fluoride	Lead	Lithium	Mercury	Molybdenum	Selenium	Thallium	Radium 226/228 Combined
Units	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	mg/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	pCi/L
GWPS	6	11	2000	4	5	100	6	4	15	2987.5	2	660	50	2	5

Notes:
ug/L = micrograms per liter (ppb)
mg/L = milligrams per liter (ppm)
pCi/L = picoCuries per liter
GWPS = Groundwater Protection Standard

FIGURES

Figure 1: Site Location Map

Figure 2: CCR Groundwater Monitoring System

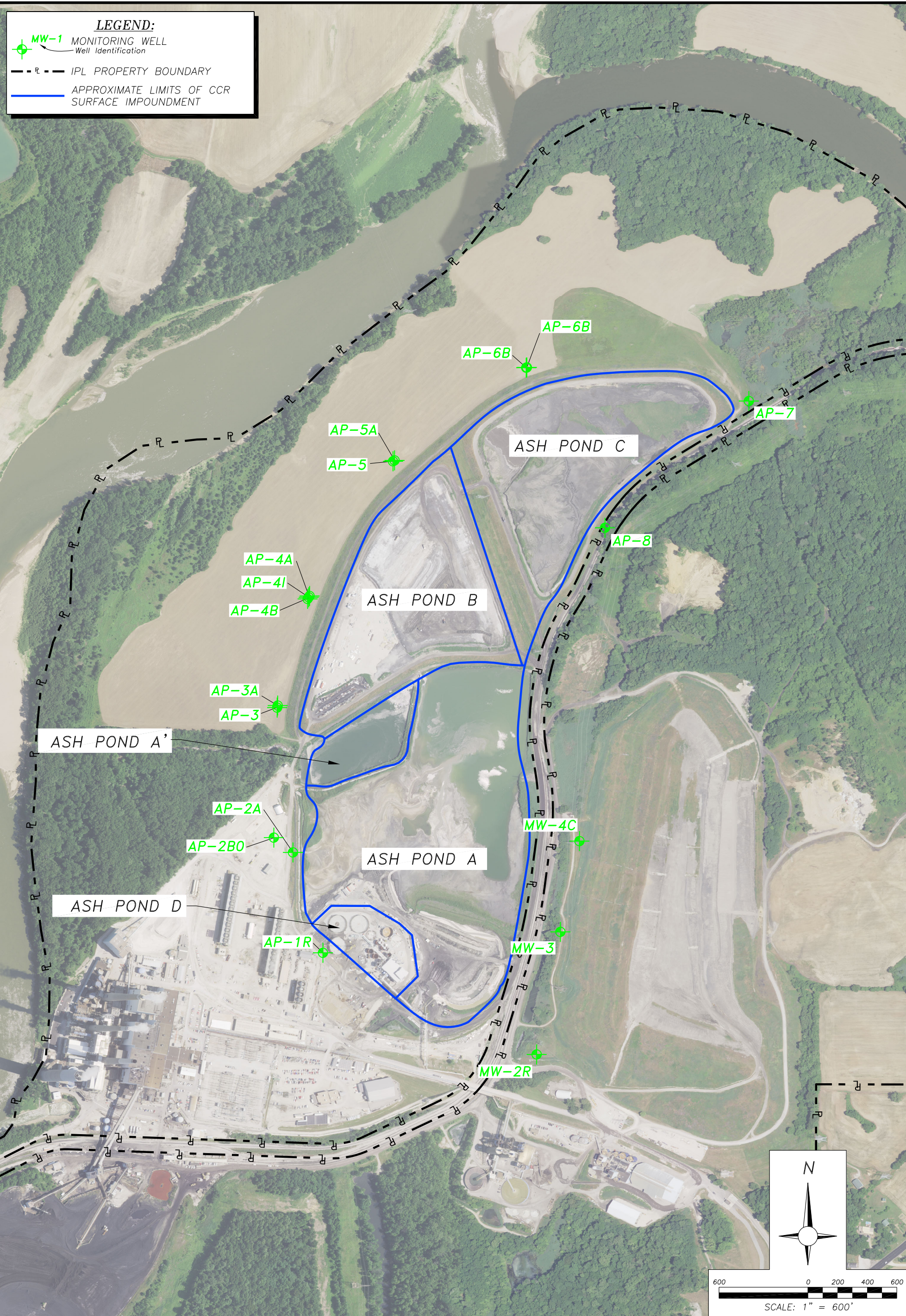


Figure: 2	Date: 1/18 Scale: AS SHOWN	CCR GROUNDWATER MONITORING SYSTEM IPL PETERSBURG GENERATING STATION ASH POND SYSTEM PETERSBURG, INDIANA		Project Number: 170LF00307		Drn. By: RL	
				Drawing File: SEE TOP LEFT		Ckd. By: MB	
						App'd By:	
						Ckd. Date:	