



January 31, 2018

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Mr. David M. Heger
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Re: CCR Annual Groundwater Monitoring and Corrective Action Report

Indianapolis Power & Light Company
Petersburg Generating Station
Ash Pond System
Petersburg, Indiana
ATC Project No. 170LF00307

Dear Mr. Heger:

ATC Group Services LLC (ATC) has prepared this 2017 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:

- In accordance with § 257.90(b)(1)(i), IPL installed a groundwater monitoring system as required by § 257.91.
- In accordance with § 257.90(b)(1)(ii), IPL developed the groundwater sampling and analysis program to include the selection of the statistical procedures to be used for evaluating groundwater monitoring data as required by § 257.93.
- In accordance with § 257.90(b)(1)(iii), IPL initiated a detection monitoring program to obtain a minimum of eight samples from each background and downgradient well as required by § 257.94(b).
- In accordance with § 257.91(f), IPL provided the groundwater monitoring system certification.
- In accordance with § 257.93(f)(6), IPL provided the certification that the selected statistical method is appropriate for evaluating the groundwater monitoring data for the CCR management area.

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;

Because this is the first CCR annual report, relevant activities conducted prior to and during 2017 are summarized below.

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 five (5) downgradient locations (AP-2A/B, AP-3/3A, AP-4A/I/B, AP-5/5A, and AP-6A/B). 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.

§ 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;

In accordance with § 257.94(b), a minimum of eight independent samples from each background and downgradient monitoring well were collected prior to October 17, 2017. Each of the sampling events completed through 2017 were part of the detection monitoring program.

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 2016 and 2017 are summarized in Tables 2 through 10.

§ 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), the 2017 annual report documents activities conducted during the prior calendar year at the CCR management units subject to the Rule. The statistical analysis of the initial minimum eight rounds of groundwater sampling was not completed in 2017 and therefore is not reported in this Annual Report. 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) will be provided, as appropriate, in subsequent annual reports.

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

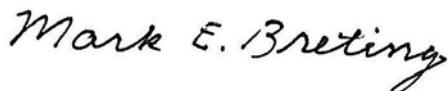
Other information required to be included in this report will be provided, as appropriate, in subsequent annual reports.

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

Sincerely,



Slawa Bruder
Project Geologist



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



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

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Table 1
Well Sampling Summary
Ash Pond System - Ash Ponds A, A', and C
Indianapolis Power Light Company
Petersburg Generating Station, Petersburg, Indiana
ATC Project No. 170LF00307

Identification	Date Installed	Upgradient, Background, or Downgradient	Number of Samples	Sample Date	Detection or Assessment Monitoring
Deep and Shallow Monitoring Well Network - Upgradient Wells					
MW-2 (2R)	MW-2 - 1986 MW-2R - 2/1/2017	Upgradient	12	9/28/2016 10/19/2016 11/9/2016 12/12/2016 3/16/2017 3/17/2017 3/24/2017 4/20/2017 4/24/2017 5/16/2017 6/20/2017 8/8/2017	Detection
MW-3	1986	Upgradient	9	9/28/2016 10/19/2016 11/9/2016 12/12/2016 2/5/2017 3/24/2017 5/25/2017 6/20/2017 8/8/2017	Detection
MW-4C	9/29/1992	Upgradient	9	9/28/2016 10/19/2016 11/9/2016 12/12/2016 2/5/2017 3/25/2017 5/25/2017 6/20/2017 8/8/2017	Detection
Deep Monitoring Well Network - Downgradient Monitoring Wells					
AP-2A	6/11/2014	Downgradient	9	9/28/2016 10/19/2016 11/9/2016 12/12/2016 2/5/2017 3/24/2017 5/24/2017 6/21/2017 8/10/2017	Detection
AP-3A	5/13/2015	Downgradient	9	9/28/2016 10/18/2016 11/8/2016 12/13/2016 2/4/2017 3/23/2017 5/24/2017 6/21/2017 8/9/2017	Detection
AP-4A	6/16/2014	Downgradient	9	9/29/2016 10/18/2016 11/8/2016 12/13/2016 2/4/2017 3/23/2017 5/24/2017 6/21/2017 8/9/2017	Detection

Table 1
Well Sampling Summary
Ash Pond System - Ash Ponds A, A', and C
Indianapolis Power Light Company
Petersburg Generating Station, Petersburg, Indiana
ATC Project No. 170LF00307

Identification	Date Installed	Upgradient, Background, or Downgradient	Number of Samples	Sample Date	Detection or Assessment Monitoring
AP-5A	5/12/2015	Downgradient	9	9/29/2016 10/18/2016 11/8/2016 12/13/2016 2/4/2017 3/23/2017 5/23/2017 6/21/2017 8/9/2017	Detection
AP-6A	6/17/2014	Downgradient	9	9/29/2016 10/18/2016 11/8/2016 12/13/2016 2/4/2017 3/23/2017 5/23/2017 6/21/2017 8/9/2017	Detection
Shallow Monitoring Well Network - Downgradient Monitoring Wells					
AP-1R*	4/5/2016	Downgradient	9	9/28/2016 10/19/2016 11/9/2016 12/12/2016 2/5/2017 3/24/2017 5/16/2017 6/22/2017 8/10/2017	Detection
AP-2BO	4/5/2016	Downgradient	9	9/28/2016 10/19/2016 11/9/2016 12/12/2016 2/5/2017 3/24/2017 5/24/2017 6/22/2017 8/9/2017	Detection
AP-3	6/9/2014	Downgradient	9	9/28/2016 10/18/2016 11/8/2016 12/13/2016 2/4/2017 3/23/2017 5/24/2017 6/21/2017 8/9/2017	Detection
AP-4B	6/17/2014	Downgradient	9	9/29/2016 10/18/2016 11/8/2016 12/13/2016 2/4/2017 3/23/2017 5/24/2017 6/21/2017 8/9/2017	Detection
AP-4I	6/16/2014	Downgradient	9	9/29/2016 10/18/2016 11/8/2016 12/13/2016 2/4/2017 3/23/2017 5/24/2017 6/21/2017 8/9/2017	Detection

Table 1
Well Sampling Summary
Ash Pond System - Ash Ponds A, A', and C
Indianapolis Power Light Company
Petersburg Generating Station, Petersburg, Indiana
ATC Project No. 170LF00307

Identification	Date Installed	Upgradient, Background, or Downgradient	Number of Samples	Sample Date	Detection or Assessment Monitoring
AP-5	6/17/2014	Downgradient	9	9/29/2016 10/18/2016 11/8/2016 12/13/2016 2/4/2017 3/23/2017 5/23/2017 6/21/2017 8/9/2017	Detection
AP-6B	6/18/2014	Downgradient	9	9/29/2016 10/18/2016 11/8/2016 12/13/2016 2/4/2017 3/23/2017 5/23/2017 6/21/2017 8/9/2017	Detection
AP-7	6/10/2014	Downgradient	9	9/28/2016 10/19/2016 11/9/2016 12/12/2016 2/5/2017 3/25/2017 5/24/2017 6/21/2017 8/8/2017	Detection
AP-8	6/10/2014	Downgradient	9	9/26/2016 10/19/2016 11/9/2016 12/12/2016 2/5/2017 3/25/2017 5/24/2017 6/20/2017 8/8/2017	Detection

* Monitoring well AP-1R is also labeled as AP-1AR in the 2016 laboratory reports.

Table 2
 Summary of Detection Monitoring Results - September 2016
 Petersburg Generating Station - Ash Ponds A, A' and C
 Petersburg, Indiana
 ATC Project No. 170LF00307

	AP-1AR	AP-2A	AP-2BO	AP-3	AP-3A	AP-4A	AP-4B	AP-4I	AP-5	AP-5A	AP-6A	AP-6B	AP-7	AP-8	MW-2	MW-3	MW-4C	
6091888-01	6091888-02	6091888-03	6091888-04	6091888-05	6091888-06	6091888-07	6091888-08	6091888-09	6091888-10	6091888-11	6091888-12	6091888-13	6091888-14	6091888-15	6091888-16	6091888-17		
28/09/2016	28/09/2016	28/09/2016	28/09/2016	28/09/2016	29/09/2016	29/09/2016	29/09/2016	29/09/2016	29/09/2016	29/09/2016	29/09/2016	28/09/2016	28/09/2016	28/09/2016	28/09/2016	28/09/2016		
Static Water Elevation	(ft MSL)	410.31	408.23	408.46	409.24	408.38	408.28	408.25	408.27	407.90	407.93	407.99	408.15	422.85	439.35	439.21	441.01	448.19
Field Parameters																		
Temperature, Field	°C	19.46	18.64	18.71	18.63	18.95	17.96	17.61	17.33	16.79	17.59	16.12	16.45	17.11	17.62	16.8	17.92	16.64
Dissolved Oxygen, Field	mg/L	0.4	0.5	0.33	1.98	0.53	0.60	0.16	0.16	0.27	1.15	0.86	1.72	0.12	0.06	0.84	0.17	0.28
Conductivity, Field	µS/cm	2537.69	2668.43	2724.66	2120.01	2735.45	2939.01	1596.95	2838.52	2776.32	2695.16	2525.73	1327.17	1424.36	1181.17	3012.88	2256.41	2687.41
ORP, Field	mV	-72.85	-51.08	89.92	108.65	-17.14	-10.54	108.01	98.87	143.17	0.74	22.15	110.34	-21.3	139.79	29.46	107.99	149.12
pH, Field	SU	7.15	7.48	7.81	6.9	7.17	7.08	6.71	7.14	7.15	7.05	6.97	6.90	6.56	5.25	6.69	7.16	6.91
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	<0.0050	<0.0050	<0.0050	
Arsenic, 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	0.011	<0.0050	<0.0050	<0.0050	
Barium, Total	mg/L	0.085	0.054	0.027	0.026	0.043	0.038	0.062	0.029	0.024	0.031	0.034	0.036	0.049	0.018	0.043	0.032	0.027
Beryllium, 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	<0.010	<0.010	<0.010	
Boron, Total	mg/L	15	21	23	6.6	28	26	2.7	18	13	18	12	0.96	<0.50	1.1	2.5	1	4.9
Cadmium, 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	0.016	<0.010	<0.010	<0.010
Calcium, Total	mg/L	550	600	620	410	630	600	320	650	620	590	440	200	200	130	520	260	520
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	<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	0.44	<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	<0.010	<0.010	<0.010	<0.010
Lithium, Total	mg/L	<0.10	0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	1.1	2	0.31
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	<0.00020	<0.00020	<0.00020	<0.00020
Molybdenum, Total	mg/L	<0.10	2.6	0.69	<0.10	1	0.25	<0.10	0.11	0.11	0.2	<0.10	<0.10	<0.10	<0.10	<0.10	0.35	<0.10
Selenium, 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	<0.020	<0.020	<0.020	<0.020
Thallium, Total	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Radium-Combined	pCi/L	1.5	2.9	1.4	1.5	2.1	1.6	1.8	2.2	1.2	1.3	1.1	1.0	1.6	1.5	3.5	1.4	2.1
Chloride	mg/L	80	99	99	45	99	120	9.2	87	67	58	36	7.8	3.1	9.7	88	98	47
Fluoride	mg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.74	<0.50	<0.50	<0.50
pH	SU	6.86	6.97	7.24	6.89	6.88	6.81	6.47	7	7.02	6.83	6.88	6.83	6.51	5.19	6.32	7.25	6.98
Solids, Dissolved	mg/L	2300	2500	1700	1800	2400	2600	1300	2600	2400	2600	2400	920	990	1000	2600	1600	2300
Sulfate	mg/L	810	950	950	640	1100	970	400	950	970	1100	870	280	280	530	1000	600	840

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

mg/L: milligram per liter

SU: standard units

pCi/L: picoCurie per liter

ft MSL: feet mean sea level

°C: degrees celcius

µS/cm: microsiemen per centimeter

mV: millivolt

Table 3
 Summary of Detection Monitoring Results - October 2016
 Petersburg Generating Station - Ash Ponds A, A' and C
 Petersburg, Indiana
 ATC Project No. 170LF00307

	AP-1AR	AP-2A	AP-2BO	AP-3	AP-3A	AP-4A	AP-4B	AP-4I	AP-5	AP-5A	AP-6A	AP-6B	AP-7	AP-8	MW-2	MW-3	MW-4C	
6080847-01	6080847-02	6080847-03	6080847-04	6080847-05	6080847-06	6080847-07	6080847-08	6080847-09	6080847-10	6080847-11	6080847-12	6080847-13	6080847-14	6080847-15	6080847-16	6080847-17		
19/10/2016	19/10/2016	19/10/2016	18/10/2016	18/10/2016	18/10/2016	18/10/2016	18/10/2016	18/10/2016	18/10/2016	18/10/2016	18/10/2016	19/10/2016	19/10/2016	19/10/2016	19/10/2016	19/10/2016		
Static Water Elevation	(ft MSL)	409.27	407.18	407.31	408.00	407.21	406.89	406.93	406.92	406.56	406.61	406.67	406.8	422.4	438.83	438.84	440.91	448.41
Field Parameters																		
Temperature, Field	°C	18.95	19.54	19.31	19.12	21.21	19.22	18.59	18.73	19.54	20.46	21.21	17.49	18.22	19.7	19.08	18.76	18.49
Dissolved Oxygen, Field	mg/L	0.26	0.99	0.47	3.07	0.38	0.28	0.42	0.35	0.22	0.74	1.77	1.67	0.34	0.14	0.57	0.16	0.24
Conductivity, Field	µS/cm	2516.69	2683.3	2751.29	1870.05	2771.26	2944.7	1614.08	2828.38	2785.77	2698.87	2543	1431.34	1452.8	1220.9	3064.2	2387.85	2759.63
ORP, Field	mV	-125.58	-88.41	7.77	194.11	-97.85	-84.44	49.1	-29.48	34.03	-79.93	-62.06	30.8	-64	120.4	-53.81	-36.85	25.46
pH, Field	SU	7.2	7.29	7.79	6.85	7.14	7.07	6.69	7.18	7.14	7.04	6.99	6.87	6.65	5.27	6.89	7.33	6.96
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	<0.0050	<0.0050	<0.0050	
Arsenic, 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	<0.010	<0.010	<0.010	
Barium, Total	mg/L	0.073	0.056	0.024	0.023	0.037	0.03	0.056	0.028	0.025	0.024	0.041	0.039	0.056	0.017	0.037	0.031	0.028
Beryllium, 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	<0.010	<0.010	<0.010	
Boron, Total	mg/L	16	21	21	5.2	27	25	2.6	17	13	18	12	1.3	<0.50	1.3	2.6	1.1	5.1
Cadmium, 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	<0.010	<0.010	<0.010	
Calcium, Total	mg/L	510	580	610	360	600	550	300	630	620	580	430	230	220	130	510	280	520
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	<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	<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	<0.010	<0.010	<0.010	
Lithium, Total	mg/L	<0.10	0.1	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.82	1.9	0.28
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	<0.00020	<0.00020	<0.00020	
Molybdenum, Total	mg/L	<0.10	2.7	0.82	<0.10	1.1	0.31	<0.10	0.11	0.16	0.24	<0.10	<0.10	<0.10	<0.10	<0.10	0.33	<0.10
Selenium, 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	<0.010	<0.010	<0.010	
Thallium, Total	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
Radium-Combined	pCi/L	2.6	3.0	1.9	1.8	1.9	2.7	2.1	2.0	2.1	1.4	2.0	3.1	1.3	2.2	2.0	2.5	1.1
Chloride	mg/L	58	71	70	24	97	88	6.7	57	47	40	23	6	<5.0	7.2	68	71	33
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	<5.0	<5.0	<5.0	
pH	SU	6.89	6.99	7.26	6.84	6.89	6.9	6.62	7.12	7.1	6.85	6.82	6.9	6.46	5.21	7.23	7.32	6.99
Solids, Dissolved	mg/L	2300	2600	2700	1600	2700	2800	1300	2800	2700	2700	2500	1100	1100	1000	2800	1900	2400
Sulfate	mg/L	940	890	990	580	900	1000	350	990	970	900	920	320	250	450	970	700	940

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

mg/L: milligram per liter

SU: standard units

pCi/L: picoCurie per liter

ft MSL: feet mean sea level

°C: degrees celcius

µS/cm: microsiemen per centimeter

mV: millivolt

Table 4
 Summary of Detection Monitoring Results - November 2016
 Petersburg Generating Station - Ash Ponds A, A' and C
 Petersburg, Indiana
 ATC Project No. 170LF00307

	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	AP-8	MW-2	MW-3	MW-4C	
	6101689-01	6101689-03	6101689-04	6101689-05	6101689-06	6101689-07	6101689-08	6101689-09	6101689-10	6101689-11	6101689-12	6101689-13	6101689-14	6101689-15	6101689-16	6101689-17	6101689-18	
	09/11/2016	09/11/2016	09/11/2016	08/11/2016	08/11/2016	08/11/2016	08/11/2016	08/11/2016	08/11/2016	08/11/2016	08/11/2016	08/11/2016	09/11/2016	09/11/2016	09/11/2016	09/11/2016	09/11/2016	
Static Water Elevation	(ft MSL)	409.34	407.69	407.84	408.24	407.87	408.07	407.97	407.98	407.41	407.16	410.14	407.17	422.42	438.03	438.29	440.87	448.26
Field Parameters																		
Temperature, Field	°C	18.43	NA	17.31	18.61	17.73	17.73	18.37	17.57	NA	17.55	15.53	16.43	15.40	17.22	16.81	17.77	17.01
Dissolved Oxygen, Field	mg/L	1.08	NA	0.48	1.91	0.23	0.28	0.48	0.21	NA	0.23	0.90	2.22	0.20	0.13	0.49	0.25	0.61
Conductivity, Field	µS/cm	2573.51	NA	2848.91	2271.25	2841.04	3077.68	1660.63	2929.89	NA	2764.76	2632.99	1498.33	1490.12	1205.15	3157.17	2302.99	2821.46
ORP, Field	mV	-130.87	NA	-31.51	96.88	-158.05	-126.19	112.21	-101.62	NA	-120.58	-95.10	82.68	-78.14	74.90	-82.94	32.55	75.42
pH, Field	SU	7.07	NA	7.79	6.80	7.24	7.00	6.61	7.14	NA	7.03	6.93	6.77	6.54	5.24	6.81	7.18	6.87
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	<0.0050	<0.0050	<0.0050	
Arsenic, 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	<0.020	<0.020	<0.020	
Barium, Total	mg/L	0.083	0.059	0.028	0.028	0.038	0.037	0.061	0.032	0.023	0.025	0.034	0.039	0.054	0.016	0.037	0.036	0.032
Beryllium, 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	<0.010	<0.010	<0.010	
Boron, Total	mg/L	13	17	18	6.2	22	20	3	15	12	16	12	1.1	<0.50	1	2.2	1	4.9
Cadmium, 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	0.012	<0.010	<0.010	<0.010
Calcium, Total	mg/L	560	650	660	480	680	650	340	710	610	640	490	250	230	130	550	270	560
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	<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	0.41	<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	0.011	0.01	<0.010	<0.010	<0.010	0.01	<0.010	<0.010	<0.010
Lithium, Total	mg/L	<0.10	0.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.78	2.2	0.33
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	<0.00020	<0.00020	<0.00020	
Molybdenum, Total	mg/L	<0.10	2.7	0.81	<0.10	1.1	0.28	<0.10	0.12	0.14	0.21	<0.10	<0.10	<0.10	<0.10	0.28	<0.10	
Selenium, 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	<0.020	<0.020	<0.020	
Thallium, Total	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
Radium-Combined	pCi/L	1.8	0.61	<0.52	2.5	1.8	0.62	<0.58	0.59	0.49	<0.56	<0.45	0.48	<0.50	0.80	<0.45	1.8	0.86
Chloride	mg/L	77	98	96	48	77	74	11	80	71	55	35	9.2	3.1	9.4	98	67	49
Fluoride	mg/L	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.61	<0.50	<0.50	
pH	SU	6.92	7.1	7.26	6.82	6.92	6.95	6.68	7.12	7.19	6.83	6.89	6.86	6.59	5.37	6.8	7.29	7.03
Solids, Dissolved	mg/L	2300	2600	2700	2000	2600	2900	1400	2800	2700	2700	2600	1200	1100	1000	2900	1800	2600
Sulfate	mg/L	1100	1200	900	620	850	1000	290	980	1100	930	900	360	270	450	1100	550	790

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

mg/L: milligram per liter

SU: standard units

pCi/L: picoCurie per liter

ft MSL: feet mean sea level

°C: degrees celcius

µS/cm: microsiemen per centimeter

mV: millivolt

NA: Not Available.

Table 5
 Summary of Detection Monitoring Results - December 2016
 Petersburg Generating Station - Ash Ponds A, A' and C
 Petersburg, Indiana
 ATC Project No. 170LF00307

	AP-1AR	AP-2A	AP-2BO	AP-3	AP-3A	AP-4A	AP-4B	AP-4I	AP-5	AP-5A	AP-6A	AP-6B	AP-7	AP-8	MW-2	MW-3	MW-4C	
6121143-01	6121143-03	6121143-04	6121143-05	6121143-06	6121143-07	6121143-08	6121143-09	6121143-10	6121143-11	6121143-12	6121143-13	6121143-14	6121143-15	6121143-16	6121143-17	6121143-18		
12/12/2016	12/12/2016	12/12/2016	13/12/2016	13/12/2016	13/12/2016	13/12/2016	13/12/2016	13/12/2016	13/12/2016	13/12/2016	13/12/2016	12/12/2016	12/12/2016	12/12/2016	12/12/2016	12/12/2016		
Static Water Elevation	(ft MSL)	409.06	408.31	408.47	408.65	408.29	408.70	408.59	408.62	408.69	408.48	408.70	408.67	423.35	438.58	438.2	441.01	448.59
Field Parameters																		
Temperature, Field	°C	15.28	11.87	15.10	16.52	13.25	15.91	15.68	15.28	15.43	11.28	13.73	14.59	14.53	13.98	13.71	14.75	14.43
Dissolved Oxygen, Field	mg/L	0.25	1.7	0.31	0.91	0.76	0.07	0.37	0.20	0.59	1.66	0.34	0.22	0.19	0.04	0.41	0.15	0.28
Conductivity, Field	µS/cm	2013.67	2008.27	2242.62	2174.98	2150.87	2485.69	1431.04	2330.04	2366.33	2012.29	2073.46	1198.77	1157.99	923.68	2437.64	2098.80	2246.11
ORP, Field	mV	-200	-140	-200	-140	-180	-220	-170	-210	-180	-130	-190	-190	-150	70	-120	-220	-140
pH, Field	SU	6.97	7.02	7.38	6.66	6.9	6.92	6.51	7.02	7.03	6.95	6.93	6.74	6.43	5.04	6.65	7.12	6.76
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	<0.0050	<0.0050	<0.0050	
Arsenic, 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	<0.0050	<0.0050	<0.0050	
Barium, Total	mg/L	0.079	0.057	0.022	0.027	0.049	0.034	0.045	0.024	0.018	0.031	0.029	0.031	0.045	0.013	0.029	0.029	0.026
Beryllium, 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	<0.010	<0.010	<0.010	
Boron, Total	mg/L	12	20	20	7.3	26	21	2.8	21	13	16	12	1.5	<0.50	0.9	2.8	0.92	4.9
Cadmium, 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	<0.010	<0.010	<0.010	
Calcium, Total	mg/L	440	560	580	420	600	570	560	580	620	550	440	230	210	130	480	310	460
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	<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	<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	<0.010	<0.010	<0.010	
Lithium, Total	mg/L	<0.10	0.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.51	2.2	0.26
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	<0.00020	<0.00020	<0.00020	
Molybdenum, Total	mg/L	<0.10	2.1	0.58	<0.10	0.82	0.21	<0.10	0.18	0.21	0.16	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
Selenium, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0064	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Thallium, Total	mg/L	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
Radium-Combined	pCi/L	1.3	3.2	1.9	1.1	1.8	1.5	0.59	1.7	1.8	1.7	2.2	1.8	1.9	2.7	1.8	2.1	2.3
Chloride	mg/L	60	79	19	48	120	100	14	81	62	59	30	9	<5.0	7.5	85	73	40
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	<5.0	<5.0	<5.0	<5.0
pH	SU	6.87	7.06	7.05	6.76	6.88	6.85	6.62	6.84	7.09	6.75	6.8	6.72	6.46	5.16	6.7	7.23	6.85
Solids, Dissolved	mg/L	2300	2600	2600	2300	2700	2900	1600	2800	2900	2700	2600	1200	1100	970	2900	2200	2600
Sulfate	mg/L	960	1200	270	950	1100	1400	660	1200	1700	1300	490	290	490	1400	950	1100	

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

mg/L: milligram per liter

SU: standard units

pCi/L: picoCurie per liter

ft MSL: feet mean sea level

°C: degrees celcius

µS/cm: microsiemen per centimeter

mV: millivolt

Table 6

Summary of Detection Monitoring Results - February 2017
 Petersburg Generating Station - Ash Ponds A, A' and C
 Petersburg, Indiana
 ATC Project No. 170LF00307

	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	AP-8	MW-3	MW-4C	
	7020352-01	7020352-03	7020352-04	7020352-05	7020352-06	7020352-07	7020352-08	7020352-09	7020352-10	7020352-11	7020352-12	7020352-13	7020352-14	7020352-15	7020352-16	7020352-17	
	05/2/2017	05/2/2017	05/2/2017	04/2/2017	04/2/2017	04/2/2017	04/2/2017	04/2/2017	04/2/2017	04/2/2017	04/2/2017	04/2/2017	05/2/2017	05/2/2017	05/2/2017	05/2/2017	
Static Water Elevation	(ft MSL)	414.68	412.16	412.27	412.95	412.59	413.63	413.52	413.55	413.11	412.87	413.41	413.40	423.83	439.24	441.19	448.36
Field Parameters																	
Temperature, Field	°C	17.06	17.06	16.27	15.42	14.40	16.13	14.26	15.24	15.42	14.40	12.41	14.05	14.79	12.52	14.64	13.73
Dissolved Oxygen, Field	mg/L	0.57	0.18	0.38	0.08	0.28	0.04	3.78	0.12	0.03	0.50	1.42	0.25	0.18	0.06	0.10	0.38
Conductivity, Field	µS/cm	2455.9	2635.92	2741.23	2775.65	2742.16	2954.72	1404.28	2791.11	2782.17	2629.52	2563.76	1563.96	1410.89	1140.17	2575.32	2798.36
ORP, Field	mV	-104.69	-142.42	-17.91	63.79	-79.44	-97.91	49.71	-53.09	45.82	-80.16	-69.17	22.89	-71.55	72.08	78.67	81.37
pH, Field	SU	7.1	7.54	7.48	6.78	6.94	6.99	6.67	6.96	7.21	7.00	7.01	6.88	6.61	5.37	7.22	6.97
Analytical Data																	
Antimony, Total	mg/L	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Arsenic, 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	<0.010	<0.010	<0.010
Barium, Total	mg/L	0.075	0.051	0.026	0.029	0.04	0.042	0.078	0.033	0.023	0.039	0.056	0.071	0.053	0.015	0.037	0.03
Beryllium, Total	mg/L	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040
Boron, Total	mg/L	13	21	20	12	27	21	2.4	21	14	17	14	1.4	<0.50	0.8	1	5
Cadmium, 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	0.015	<0.0010	<0.0010
Calcium, Total	mg/L	520	590	600	510	650	620	280	600	710	650	470	270	240	130	360	550
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	<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	0.5	<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	<0.010	<0.010	<0.010
Lithium, Total	mg/L	<0.10	0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	2.1	0.31
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	<0.00020	<0.00020	<0.00020
Molybdenum, Total	mg/L	<0.10	3	0.66	<0.10	1	0.25	<0.10	0.16	0.2	0.2	<0.10	<0.10	<0.10	<0.10	0.66	<0.10
Selenium, Total	mg/L	<0.0050	<0.030	<0.0050	<0.030	<0.0050	<0.0050	0.0093	<0.030	<0.0050	<0.030	<0.0050	<0.0050	<0.030	<0.030	<0.030	<0.030
Thallium, Total	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Radium-Combined	pCi/L	1.4	2.4	1.8	1.6	1.5	2.6	0.59	1.6	1.7	2.7	2.1	1.9	1.5	2.5	1.7	2.5
Chloride	mg/L	62	85	83	76	120	97	18	83	58	43	31	8.8	<5.0	11	69	38
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	<5.0	<5.0	<5.0
pH	SU	6.87	7.02	7	6.73	6.84	6.86	6.61	6.96	7.13	6.87	6.79	6.72	7.39	5.24	7.46	7
Solids, Dissolved	mg/L	2200	2500	2500	2400	2400	2700	1200	2700	2700	2600	1200	1000	910	2200	2600	
Sulfate	mg/L	860	1100	980	950	1100	1100	360	1100	1200	1000	1000	480	340	560	970	880

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

mg/L: milligram per liter

SU: standard units

pCi/L: picoCurie per liter

ft MSL: feet mean sea level

°C: degrees celsius

µS/cm: microsiemen per centimeter

mV: millivolt

Table 7
 Summary of Detection Monitoring Results - March 16, 2017
 Petersburg Generating Station - Ash Ponds A, A' and C
 Petersburg, Indiana
 ATC Project No. 170LF00307

		MW-2R
		7030943-01
		16/3/2017
Static Water Elevation	(ft MSL)	439.48
Field Parameters		
Temperature, Field	°C	13.97
Dissolved Oxygen, Field	mg/L	0.18
Conductivity, Field	µS/cm	1966.20
ORP, Field	mV	-37.61
pH, Field	SU	6.64
Analytical Data		
Antimony, Total	mg/L	<0.020
Arsenic, Total	mg/L	<0.010
Barium, Total	mg/L	0.053
Beryllium, Total	mg/L	<0.0010
Boron, Total	mg/L	1.1
Cadmium, Total	mg/L	<0.0020
Calcium, Total	mg/L	500
Chromium, Total	mg/L	<0.010
Cobalt, Total	mg/L	<0.020
Lead, Total	mg/L	<0.010
Lithium, Total	mg/L	0.28
Mercury, Total	mg/L	<0.00020
Molybdenum, Total	mg/L	<0.10
Selenium, Total	mg/L	<0.0050
Thallium, Total	mg/L	<0.0050
Radium-Combined	pCi/L	<0.55
Chloride	mg/L	81
Fluoride	mg/L	<5.0
pH	SU	6.83
Solids, Dissolved	mg/L	2400
Sulfate	mg/L	990

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

mg/L: milligram per liter

SU: standard units

pCi/L: picoCurie per liter

ft MSL: feet mean sea level

°C: degrees celcius

µS/cm: microsiemen per centimeter

mV: millivolt

Table 8
 Summary of Detection Monitoring Results - March 17, 2017
 Petersburg Generating Station - Ash Ponds A, A' and C
 Petersburg, Indiana
 ATC Project No. 170LF00307

		MW-2R
		7030942-01
		17/3/2017
Static Water Elevation	(ft MSL)	439.25
Field Parameters		
Temperature, Field	°C	12.34
Dissolved Oxygen, Field	mg/L	1.47
Conductivity, Field	µS/cm	2062.69
ORP, Field	mV	-32.54
pH, Field	SU	6.76
Analytical Data		
Antimony, Total	mg/L	<0.0060
Arsenic, Total	mg/L	<0.010
Barium, Total	mg/L	0.066
Beryllium, Total	mg/L	<0.0010
Boron, Total	mg/L	1.3
Cadmium, Total	mg/L	<0.0010
Calcium, Total	mg/L	480
Chromium, Total	mg/L	<0.010
Cobalt, Total	mg/L	<0.020
Lead, Total	mg/L	<0.010
Lithium, Total	mg/L	0.41
Mercury, Total	mg/L	<0.00020
Molybdenum, Total	mg/L	<0.10
Selenium, Total	mg/L	<0.0050
Thallium, Total	mg/L	<0.0050
Radium-Combined	pCi/L	2.3
Chloride	mg/L	83
Fluoride	mg/L	<5.0
pH	SU	6.84
Solids, Dissolved	mg/L	2300
Sulfate	mg/L	940

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

mg/L: milligram per liter

SU: standard units

pCi/L: picoCurie per liter

ft MSL: feet mean sea level

°C: degrees celcius

µS/cm: microsiemen per centimeter

mV: millivolt

Table 9
 Summary of Detection Monitoring Results - March 23 - 25, 2017
 Petersburg Generating Station - Ash Ponds A, A' and C
 Petersburg, Indiana
 ATC Project No. 170LF00307

	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	AP-8	MW-2R	MW-3	MW-4C	
7030458-01	7030458-03	7030458-04	7030458-05	7030458-06	7030458-07	7030458-08	7030458-09	7030458-10	7030458-11	7030458-12	7030458-13	7030458-14	7030458-15	7030458-16	7030458-17	7030458-18		
24/3/2017	24/3/2017	24/3/2017	23/3/2017	23/3/2017	23/3/2017	23/3/2017	23/3/2017	23/3/2017	23/3/2017	23/3/2017	23/3/2017	25/3/2017	25/3/2017	24/3/2017	24/3/2017	25/3/2017		
Static Water Elevation	(ft MSL)	407.20	410.12	410.25	410.91	410.56	411.26	411.18	411.2	410.64	410.41	410.76	410.64	423.4	439.04	439.44	441.11	448.29
Field Parameters																		
Temperature, Field	°C	NA	18.13	19.06	15.39	14.73	NA	14.46	15.31	14.78	12.37	13.04	13.05	14.29	12.95	16.43	15.48	13.83
Dissolved Oxygen, Field	mg/L	NA	0.29	0.30	0.13	0.15	NA	2.23	0.19	0.3	1.41	0.26	0.71	0.23	0.04	0.78	0.09	0.48
Conductivity, Field	µS/cm	NA	2740.1	2858.47	2860.55	2832.01	NA	1733.73	2906.53	2837.1	2736.64	2608.24	1574.51	1476	1172.81	2857.11	2541.68	2867.86
ORP, Field	mV	NA	-142.21	-36.19	49.34	-97.19	NA	80.51	-32.06	54.51	-48.22	-60.49	30.64	-49.91	99.35	-39.15	122.96	181.72
pH, Field	SU	NA	7.62	7.61	6.96	7.22	NA	6.77	7.15	7.05	7.02	6.71	6.83	6.67	5.5	6.97	7.44	7.01
Analytical Data																		
Antimony, Total	mg/L	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.024	<0.024	<0.024	<0.024	<0.024	
Arsenic, Total	mg/L	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	<0.040	
Barium, Total	mg/L	0.093	0.048	0.027	0.026	0.034	0.032	0.063	0.031	0.023	0.022	0.026	0.03	0.047	0.013	0.054	0.032	0.025
Beryllium, Total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	
Boron, Total	mg/L	14	23	24	12	28	23	2.2	19	14	17	13	1.3	<0.50	0.82	1.4	1.1	4.3
Cadmium, 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	<0.0040	0.0091	<0.0040	<0.0040	<0.0040	
Calcium, Total	mg/L	530	650	680	610	670	620	320	660	720	610	450	260	200	120	440	320	610
Chromium, Total	mg/L	0.011	<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	<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	0.35	<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	<0.010	<0.010	<0.010	
Lithium, Total	mg/L	<0.10	0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.53	2.1	0.29	
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	<0.00020	<0.00020	<0.00020	
Molybdenum, Total	mg/L	<0.10	2.7	0.66	<0.10	1	0.23	<0.10	0.15	0.15	0.19	<0.10	<0.10	<0.10	<0.10	0.66	<0.10	
Selenium, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0074	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	
Thallium, 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	<0.020	<0.020	<0.020	
Radium-Combined	pCi/L	1.9	1.3	1.8	1.3	0.9	2.3	1.1	<0.58	0.98	1.1	1.5	0.98	<0.6	<0.70	1.4	<0.6	0.83
Chloride	mg/L	62	77	78	60	110	95	20	75	52	43	29	7.9	<5.0	7.4	95	79	38
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	<5.0	<5.0	<5.0	
pH	SU	7.18	7.18	7.31	6.97	7.04	7.06	6.78	7.19	7.29	6.9	7.03	7.02	6.75	5.15	6.88	7.36	7.11
Solids, Dissolved	mg/L	2200	2500	2600	2400	2700	2800	1500	2700	2700	2600	2500	1200	1000	940	2400	2100	2600
Sulfate	mg/L	980	1100	1100	1000	1100	1200	520	1100	1200	1100	1100	460	300	480	1000	890	970

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

mg/L: milligram per liter

SU: standard units

pCi/L: picoCurie per liter

ft MSL: feet mean sea level

°C: degrees celcius

µS/cm: microsiemen per centimeter

mV: millivolt

NA: Not Available.

Table 10
 Summary of Detection Monitoring Results - April 20, 2017
 Petersburg Generating Station - Ash Ponds A, A' and C
 Petersburg, Indiana
 ATC Project No. 170LF00307

		MW-2R
		7040712-01
		20/4/2017
Static Water Elevation	(ft MSL)	438.05
Field Parameters		
Temperature, Field	°C	16.6
Dissolved Oxygen, Field	mg/L	0.59
Conductivity, Field	µS/cm	3122.07
ORP, Field	mV	67.97
pH, Field	SU	6.76
Analytical Data		
Antimony, Total	mg/L	<0.0060
Arsenic, Total	mg/L	<0.010
Barium, Total	mg/L	0.046
Beryllium, Total	mg/L	<0.0010
Boron, Total	mg/L	1.7
Cadmium, Total	mg/L	<0.0010
Calcium, Total	mg/L	500
Chromium, Total	mg/L	<0.010
Cobalt, Total	mg/L	<0.020
Lead, Total	mg/L	<0.010
Lithium, Total	mg/L	0.78
Mercury, Total	mg/L	<0.00020
Molybdenum, Total	mg/L	<0.10
Selenium, Total	mg/L	<0.0050
Thallium, Total	mg/L	<0.0050
Radium-Combined	pCi/L	1.4
Chloride	mg/L	86
Fluoride	mg/L	<5.0
pH	SU	6.88
Solids, Dissolved	mg/L	2600
Sulfate	mg/L	1100

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

mg/L: milligram per liter

SU: standard units

pCi/L: picoCurie per liter

ft MSL: feet mean sea level

°C: degrees celcius

µS/cm: microsiemen per centimeter

mV: millivolt

Table 11
 Summary of Detection Monitoring Results - April 24, 2017
 Petersburg Generating Station - Ash Ponds A, A' and C
 Petersburg, Indiana
 ATC Project No. 170LF00307

		MW-2R
		7040714-01
		24/4/2017
Static Water Elevation	(ft MSL)	438.05
Field Parameters		
Temperature, Field	°C	15.94
Dissolved Oxygen, Field	mg/L	0.28
Conductivity, Field	µS/cm	3088.33
ORP, Field	mV	89.7
pH, Field	SU	6.96
Analytical Data		
Antimony, Total	mg/L	<0.0060
Arsenic, Total	mg/L	<0.010
Barium, Total	mg/L	0.056
Beryllium, Total	mg/L	<0.0010
Boron, Total	mg/L	1.6
Cadmium, Total	mg/L	<0.0010
Calcium, Total	mg/L	560
Chromium, Total	mg/L	<0.010
Cobalt, Total	mg/L	<0.020
Lead, Total	mg/L	<0.010
Lithium, Total	mg/L	0.84
Mercury, Total	mg/L	<0.00020
Molybdenum, Total	mg/L	<0.10
Selenium, Total	mg/L	<0.0050
Thallium, Total	mg/L	<0.0050
Radium-Combined	pCi/L	1.2
Chloride	mg/L	81
Fluoride	mg/L	<5.0
pH	SU	6.91
Solids, Dissolved	mg/L	2700
Sulfate	mg/L	1100

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

mg/L: milligram per liter

SU: standard units

pCi/L: picoCurie per liter

ft MSL: feet mean sea level

°C: degrees celcius

µS/cm: microsiemen per centimeter

mV: millivolt

Table 12
 Summary of Detection Monitoring Results - May 2017
 Petersburg Generating Station - Ash Ponds A, A' and C
 Petersburg, Indiana
 ATC Project No. 170LF00307

	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	AP-8	MW-2R	MW-3	MW-4C	
7051142-03	7051142-04	7051142-05	7051142-06	7051142-07	7051142-08	7051142-09	7051142-10	7051142-11	7051142-12	7051142-13	7051142-14	7051142-15	7051142-16	7051142-18	7051142-19	7051142-20		
16/5/2017	24/5/2017	24/5/2017	24/5/2017	24/5/2017	24/5/2017	24/5/2017	24/5/2017	23/5/2017	23/5/2017	23/5/2017	23/5/2017	24/5/2017	24/5/2017	16/5/2017	25/5/2017	25/5/2017		
Static Water Elevation	(ft MSL)	410.93	413.55	413.66	414.16	413.81	414.66	414.57	414.63	414.47	414.24	414.76	414.75	423.8	439.88	440.22	441.11	448.44
Field Parameters																		
Temperature, Field	°C	16.67	NA	16.38	15.71	16.19	15.63	15.06	15.63	17.07	17.21	16.82	15.44	13.7	13.93	14.89	17.4	15.5
Dissolved Oxygen, Field	mg/L	0.3	NA	0.45	0.1	0.04	2.93	2.52	0.17	0.12	0.23	0.41	0.1	0.21	0.05	0.23	0.09	0.73
Conductivity, Field	µS/cm	2396.59	NA	2682.84	2812.28	2641.24	2823.73	1812.66	2657.7	2685.99	2551.64	2553.99	1569.85	1380.64	1117.6	3169.9	2499.64	2602.2
ORP, Field	mV	-152.31	NA	-51.32	62.27	-144.24	-62.88	74.63	-58.35	70	-122.25	-114.85	52.85	-105.78	63.17	-92	-9.56	46.47
pH, Field	SU	7.34	NA	7.77	7.21	7.5	7.04	7.1	7.31	7.32	7.3	7.3	7.15	6.93	5.65	7.06	7.53	7.57
Analytical Data																		
Antimony, Total	mg/L	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Arsenic, 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	<0.010	<0.010	<0.010	<0.010
Barium, Total	mg/L	0.079	0.058	0.03	0.029	0.054	0.036	0.053	0.041	0.026	0.023	0.036	0.032	0.052	0.015	0.046	0.036	0.028
Beryllium, 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	<0.0020	<0.0010	<0.0010	<0.0010
Boron, Total	mg/L	15	23	23	17	29	22	4.3	21	14	18	16	1.4	<0.50	0.92	2	1.4	5
Cadmium, 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	<0.0068	<0.0010	<0.0010	<0.0010	<0.0010
Calcium, Total	mg/L	610	730	740	710	770	620	420	690	690	670	590	310	230	130	590	440	580
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	<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	0.29	<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	<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	<0.10	1.1	2	0.33
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	<0.00020	<0.00020	<0.00020	<0.00020
Molybdenum, Total	mg/L	<0.10	2.9	0.68	<0.10	0.99	0.26	<0.10	0.14	0.18	0.22	<0.10	<0.10	<0.10	<0.10	0.57	<0.10	
Selenium, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0082	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Thallium, 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	<0.0050	<0.0050	<0.0050	<0.0050
Radium-Combined	pCi/L	1.4	NA	1.34	<0.55	0.81	1.37	0.85	0.99	<0.51	0.75	0.92	0.6	<0.55	0.61	0.97	<0.50	1.97
Chloride	mg/L	60	76	73	72	110	90	27	70	50	39	28	8.1	<5.0	7.5	91	66	34
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	<5.0	<5.0	<5.0	<5.0
pH	SU	7.17	7.22	7.32	7.03	7.11	7.08	6.85	7.32	7.37	7.14	7.15	7.03	6.82	5.66	7.03	7.52	7.22
Solids, Dissolved	mg/L	2300	2600	2600	2800	2700	2800	1700	2800	2700	2700	1300	1100	1100	3000	2300	2600	
Sulfate	mg/L	960	970	1100	990	1000	1100	590	1100	1100	1200	480	280	450	1200	920	880	

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

mg/L: milligram per liter

SU: standard units

pCi/L: picoCurie per liter

ft MSL: feet mean sea level

°C: degrees celcius

µS/cm: microsiemen per centimeter

mV: millivolt

NA: Not Available.

Table 13

Summary of Detection Monitoring Results - June 2017
 Petersburg Generating Station - Ash Ponds A, A' and C
 Petersburg, Indiana
 ATC Project No. 170LF00307

	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	AP-8	MW-2R	MW-3	MW-4C	
	7060984-03	7060984-04	7060984-05	7060984-06	7060984-07	7060984-08	7060984-09	7060984-10	7060984-11	7060984-12	7060984-13	7060984-14	7060984-15	7060984-16	7060984-18	7060984-19	7060984-20	
	22/6/2017	21/6/2017	22/6/2017	21/6/2017	21/6/2017	21/6/2017	21/6/2017	21/6/2017	21/6/2017	21/6/2017	21/6/2017	21/6/2017	21/6/2017	21/6/2017	20/6/2017	20/6/2017	20/6/2017	
Static Water Elevation	(ft MSL)	411.81	411.07	411.25	411.69	410.70	410.77	410.75	410.76	411.52	411.65	411.61	411.67	422.65	438.62	438.03	440.80	447.70
Field Parameters																		
Temperature, Field	°C	19.10	18.99	NA	18.57	21.62	20.78	18.01	NA	18.61	25.07	22.89	17.40	16.71	17.42	17.55	18.59	16.90
Dissolved Oxygen, Field	mg/L	0.14	0.17	NA	0.15	0.06	0.06	0.70	NA	0.37	2.52	1.80	0.32	0.32	0.04	0.27	0.10	0.75
Conductivity, Field	µS/cm	2459.08	2633.29	NA	2933.80	2734.86	2910.44	2182.07	NA	2751.64	2634.46	2618.77	1526.49	1418.68	1174.40	3293.97	2370.07	2653.52
ORP, Field	mV	-100.83	-121.18	NA	103.90	-91.96	-60.74	13.23	NA	106.34	-1.21	11.61	37.13	-73.68	116.19	2.10	71.76	50.88
pH, Field	SU	7.03	7.46	NA	6.90	7.10	6.91	6.68	NA	7.09	6.67	6.49	6.83	6.65	5.27	6.48	7.06	6.88
Analytical Data																		
Antimony, Total	mg/L	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	0.0074	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060
Arsenic, 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	0.01	<0.010	<0.010	<0.010
Barium, Total	mg/L	0.07	0.048	0.027	0.029	0.034	0.028	0.051	0.03	0.022	0.021	0.025	0.027	0.047	0.015	0.045	0.036	0.027
Beryllium, 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	<0.0010	<0.0010	<0.0010	<0.0010
Boron, Total	mg/L	14	23	24	16	28	24	4.4	18	14	18	15	1.4	<0.50	0.94	2.1	1	4.4
Cadmium, 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	0.0099	<0.0010	<0.0010	<0.0010
Calcium, Total	mg/L	530	670	660	670	650	670	460	580	690	630	490	270	210	140	570	290	510
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	<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	0.4	<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	<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	<0.10	1.1	2	0.25
Mercury, Total	mg/L	0.00028	<0.00020	<0.00020	<0.00020	0.00037	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00035
Molybdenum, Total	mg/L	<0.10	2.8	0.65	<0.10	0.95	0.34	<0.10	0.14	0.21	0.2	<0.10	<0.10	<0.10	<0.10	0.51	<0.10	<0.10
Selenium, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0071	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0059	0.0052	<0.0050
Thallium, 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	<0.0050	<0.0050	<0.0050	<0.0050
Radium-Combined	pCi/L	<0.74	2.1	2.1	1.1	2.9	2.2	0.91	2	0.77	6.9	2.3	1.7	3	3.2	3.1	0.96	3.0
Chloride	mg/L	58	76	74	72	110	95	29	64	49	38	28	7.3	<5.0	7.8	92	91	31
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	<5.0	<5.0	<5.0	<5.0
pH	SU	7.69	7.24	7.56	7.81	7.09	7.63	7.8	7.67	7.66	7.53	7.6	7.74	7.64	5.86	7.61	7.89	7.83
Solids, Dissolved	mg/L	2200	2400	2500	2600	2600	2700	1800	2600	2700	2600	2600	1200	960	910	2900	1900	2500
Sulfate	mg/L	920	1100	1100	1100	1200	700	990	930	1100	1100	410	260	440	1200	730	990	

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

mg/L: milligram per liter

SU: standard units

pCi/L: picoCurie per liter

ft MSL: feet mean sea level

°C: degrees celcius

µS/cm: microsiemen per centimeter

mV: millivolt

NA: Not Available.

Table 14
 Summary of Detection Monitoring Results - August 2017
 Petersburg Generating Station - Ash Ponds A, A' and C
 Petersburg, Indiana
 ATC Project No. 170LF00307

	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	AP-8	MW-2R	MW-3	MW-4C	
7080054-01	7080054-02	7080054-03	7080054-04	7080054-05	7080054-06	7080054-07	7080054-08	7080054-09	7080054-10	7080054-11	7080054-12	7080054-13	7080054-14	7080054-16	7080054-17	7080054-18		
10/8/2017	10/8/2017	09/8/2017	09/8/2017	09/8/2017	09/8/2017	09/8/2017	09/8/2017	09/8/2017	09/8/2017	09/8/2017	09/8/2017	09/8/2017	08/8/2017	08/8/2017	08/8/2017	08/8/2017		
Static Water Elevation	(ft MSL)	412.27	409.27	409.40	410.35	409.57	409.57	409.58	409.61	409.01	409.07	409.20	409.31	422.40	438.65	436.32	440.69	447.69
Field Parameters																		
Temperature, Field	°C	NA	18.93	20.83	19.26	20.22	19.95	17.39	21.65	17.91	19.83	18.76	17.42	18.18	18.05	16.61	18.71	17.36
Dissolved Oxygen, Field	mg/L	NA	0.42	0.80	0.94	0.03	0.13	0.06	0.48	0.28	0.79	1.48	2.14	0.26	0.06	0.38	0.10	0.37
Conductivity, Field	µS/cm	NA	2719.29	2840.36	2560.62	2783.97	3024.04	1912.02	2675.31	2808.46	2741.58	2604.55	1260.24	1485.99	1245.63	3317.64	2331.81	2785.78
ORP, Field	mV	NA	-166.59	-26.33	129.16	-146.34	-104.89	111.73	-66.54	94.80	-107.46	-89.06	99.56	-97.76	94.00	-96.08	8.99	100.44
pH, Field	SU	NA	7.49	7.61	6.82	7.22	6.97	6.61	6.93	7.09	6.98	6.89	6.81	6.55	5.23	6.82	7.15	6.86
Analytical Data																		
Antimony, Total	mg/L	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	<0.0060	
Arsenic, 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	<0.010	<0.010	<0.010	
Barium, Total	mg/L	0.066	0.05	0.026	0.021	0.035	0.034	0.074	0.029	0.023	0.02	0.03	0.03	0.05	0.016	0.042	0.04	0.027
Beryllium, 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	0.0024	<0.0010	<0.0010	<0.0010	
Boron, Total	mg/L	14	23	23	7.9	27	22	2.6	15	14	17	12	0.86	<0.50	0.92	2	0.83	4.3
Cadmium, 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	0.011	<0.0010	<0.0010	<0.0010	
Calcium, Total	mg/L	540	650	650	530	670	630	340	630	660	590	460	200	210	130	500	250	540
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	<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	0.41	<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	<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	<0.10	1	1.6	0.23
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	<0.00020	<0.00020	<0.00020	
Molybdenum, Total	mg/L	<0.10	2.8	0.48	<0.10	1.1	0.2	<0.10	<0.10	0.19	<0.10	<0.10	<0.10	<0.10	<0.10	0.33	<0.10	
Selenium, Total	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0063	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	
Thallium, 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	<0.0050	<0.0050	<0.0050	
Radium-Combined	pCi/L	2.7	3.0	1.5	0.99	0.63	1.2	<0.60	1.3	<0.5	<0.86	<0.73	<0.70	0.76	1.6	0.89	2.2	2.0
Chloride	mg/L	47	60	59	30	110	68	17	46	46	50	28	5.7	<5.0	6.8	83	84	27
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	<2.5	<5.0	<5.0	<5.0	<5.0	<5.0
pH	SU	7.66	7.34	7.44	7.68	7.23	7.24	6.81	7.29	7.31	7.16	6.76	6.75	6.95	5.27	6.81	7.53	7.16
Solids, Dissolved	mg/L	2300	2500	2700	2100	2600	2700	1600	2800	2600	2700	2500	850	980	950	2700	1700	2500
Sulfate	mg/L	740	870	890	670	540	950	450	710	530	590	490	240	210	370	620	620	820

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

mg/L: milligram per liter

SU: standard units

pCi/L: picoCurie per liter

ft MSL: feet mean sea level

°C: degrees celcius

µS/cm: microsiemen per centimeter

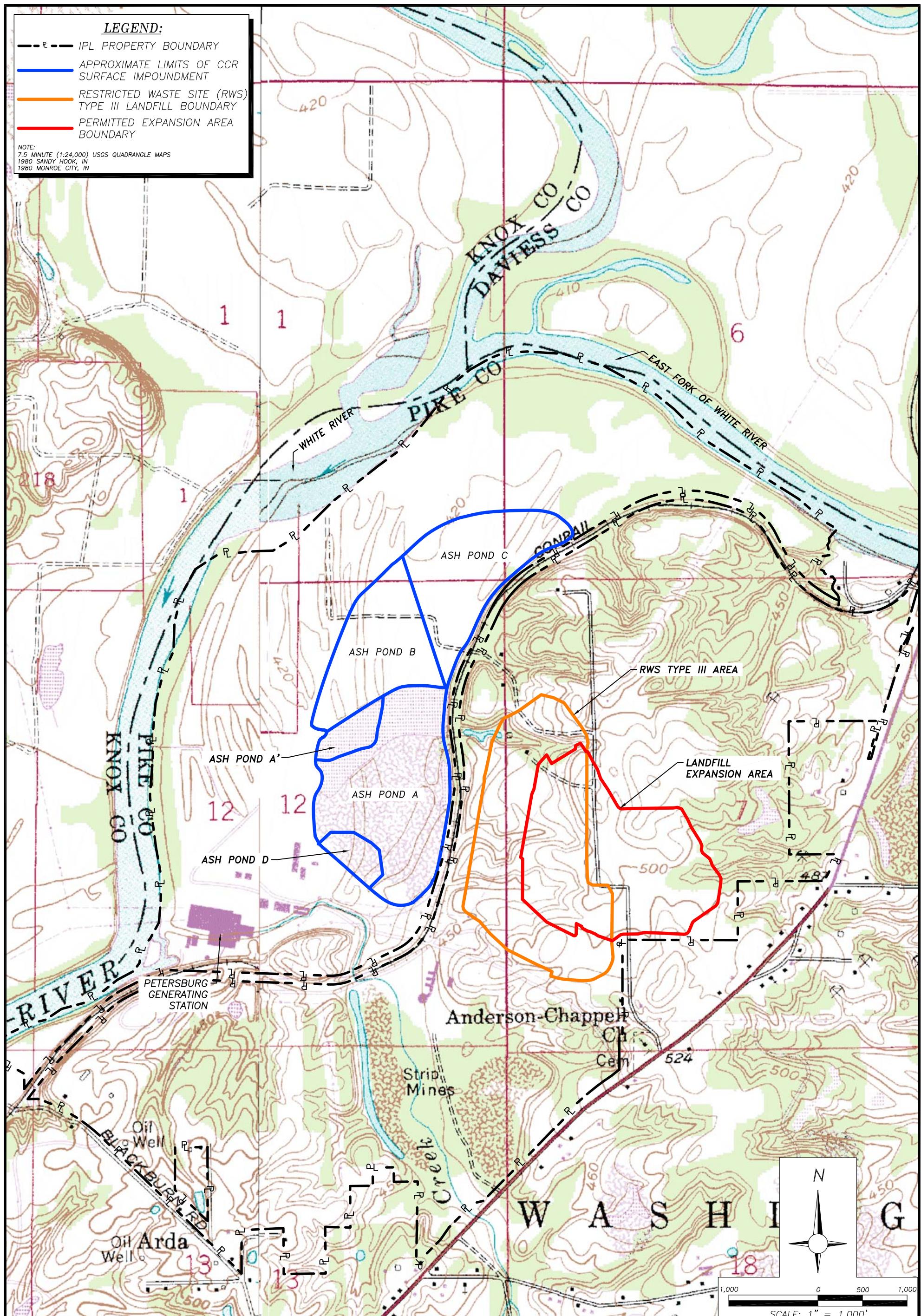
mV: millivolt

NA: Not Available.

FIGURES

Figure 1: Site Location Map

Figure 2: CCR Groundwater Monitoring System

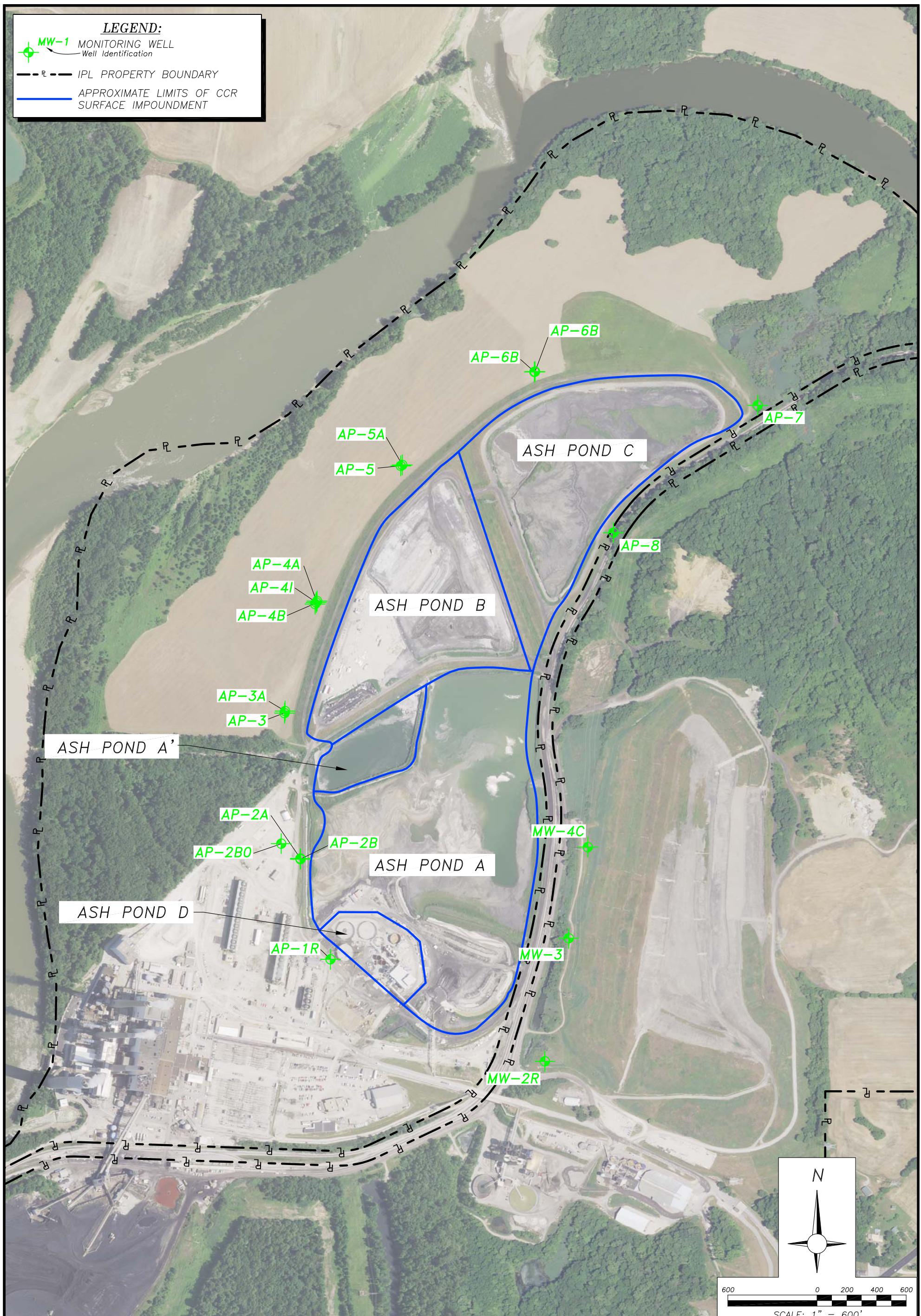
**SITE LOCATION MAP**

IPL PETERSBURG GENERATING STATION
ASH POND SYSTEM
PETERSBURG, INDIANA

Figure:
1
Date:
1/18
Scale:
AS SHOWN

Project Number: 170LF00307	Drn. By: RL
Drawing File: SEE TOP LEFT	Ckd. By: MB
	App'd By: ATC
	Ckd. Date: [Redacted]



**CCR GROUNDWATER MONITORING SYSTEM**

IPL PETERSBURG GENERATING STATION
ASH POND SYSTEM
PETERSBURG, INDIANA

Figure:

2

Date:

1/18

Scale:

AS SHOWN

Project Number:
170LF00307

Drn. By:
RL

Drawing File:
SEE TOP LEFT

Ckd. By:
MB

App'd By:
ATC

Ckd. Date:
[Redacted]

600 0 200 400 600

SCALE: 1" = 600'

