

January 28, 2022

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Re: **2021 CCR Annual Groundwater Monitoring and
Corrective Action Report**
Indianapolis Power & Light Company d/b/a AES Indiana (AESI)
Petersburg Generating Station – RWS Type I Landfill
Petersburg, Indiana
ATC Project No. 170LF01112

Dear Mr. Heger:

ATC Group Services LLC (ATC) has prepared this 2021 CCR Annual Groundwater Monitoring and Corrective Action Report for the Restricted Waste Site (RWS) Type I Landfill at the AESI 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 Landfill and summarizes information required by § 257.90(e)(1) through § 257.90(e)(6).

Federal CCR Rule § 257.90(e)(6) specifies the following:

A section at the beginning of the annual report that provides an overview of the current status of groundwater monitoring and corrective action programs for the CCR unit. At a minimum, the summary must specify all of the following: (i) At the start of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in § 257.94 or the assessment monitoring program in § 257.95; (ii) At the end of the current annual reporting period, whether the CCR unit was operating under the detection monitoring program in § 257.94 or the assessment monitoring program in § 257.95; (iii) If it was determined that there was a statistically significant increase over background for one or more constituents listed in appendix III to this part pursuant to § 257.94(e): (A) Identify those constituents listed in appendix III to this part and the names of the monitoring wells associated with such an increase; and (B) Provide the date when the assessment monitoring program was initiated for the CCR unit. (iv) If it was determined that there was a statistically significant level above the groundwater protection standard for one or more constituents listed in appendix IV to

this part pursuant to § 257.95(g) include all of the following: (A) Identify those constituents listed in appendix IV to this part and the names of the monitoring wells associated with such an increase; (B) Provide the date when the assessment of corrective measures was initiated for the CCR unit; (C) Provide the date when the public meeting was held for the assessment of corrective measures for the CCR unit; and (D) Provide the date when the assessment of corrective measures was completed for the CCR unit. (v) Whether a remedy was selected pursuant to § 257.97 during the current annual reporting period, and if so, the date of remedy selection; and (vi) Whether remedial activities were initiated or are ongoing pursuant to § 257.98 during the current annual reporting period.

Overview of 2021 Groundwater Monitoring and Corrective Action

For the duration of the 2021 reporting period, the CCR unit was operating under the Assessment Monitoring Program in § 257.95. Pursuant to 40 CFR 257.94(e)(2), 257.94(e)(3) and 257.95(b), the facility had previously established an Assessment Monitoring Program in accordance with the requirements of § 257.95 on July 16, 2018. Therefore, evaluation of statistically significant increase over background for one or more constituents listed in Appendix III to this part pursuant to § 257.94(e) was not performed in 2021.

At the end of the 2021 reporting period, it was determined that the following Appendix IV constituents were present at statistically significant levels (SSLs) above their associated groundwater protection standards (GWPS) pursuant to § 257.95(g)¹: The SSLs are as follows:

Arsenic

MW-3, MW-10²

Lithium

MW-2R, MW-3, MW-4C

Molybdenum

MW-3

The above listed SSLs are not new constituent SSLs and were previously identified. Therefore, no new SSL notification was required pursuant to § 257.94(e).

The assessment of corrective measures was initiated for the Petersburg Generating Station CCR regulated unit on April 15, 2019 in response to SSLs of Appendix IV constituents exceeding GWPS. Pursuant to 40 CFR §257.96(a), a demonstration of need for a 60-day extension for the assessment of corrective measures was completed on July 12, 2019. The Corrective Measures Assessment

¹ SSLs provided are based on the May 2021 monitoring event as November 2021 sampling data was not finalized in 2021.

² An Alternate Source Demonstration (ASD) was successfully completed pursuant to § 257.95(g)(3)(ii) in October 2019 for total arsenic in monitoring well MW-10. The ASD report was provided as an attachment to the 2019 CCR Annual Groundwater Monitoring and Corrective Action Report dated January 30, 2020 for the AESI Petersburg Generating Station – RWS Type I Landfill.

(CMA) Report was completed and placed in the facility operating record on September 13, 2019 and subsequently amended on October 11, 2019. Groundwater nature and extent work is ongoing at the facility in support of characterizing the extent of the CCR contamination plume and further support the CMA. Once the N&E is sufficiently completed, a public meeting will be held, a remedy will be selected pursuant to § 257.97, and implementation of the selected remedy will be initiated thereafter in accordance with § 257.98.

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

For existing CCR landfills and existing CCR surface impoundments, no later than January 31, 2019, 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 in 2021 in order to comply with 40 CFR 257.90-98:

- Efforts to determine the nature and extent (N&E) of the Appendix IV SSLs continued pursuant to § 257.95(g) including but not limited to the installation of additional on-site N&E monitoring equipment³, and review of groundwater analytical results/data to improve the groundwater site conceptual model.
- A mine subsidence subsurface investigation was conducted between March and June 2021 to determine surface and underground mine limits in support of engineering design of the planned landfill expansion project. This subsurface investigation was conducted upgradient of the Landfill using surface geophysical surveys, geotechnical drilling, core and soil sampling, and cross-hole radar. Also, the effect of the overlying fill material in the existing and future disposal area pertinent to differential settlement analysis and mine void conditions for mine stabilization was also determined.
- November 2020 laboratory analytical reports were finalized and placed in the facility operating record pursuant to 40 CFR 257.95(d)(1).

³ N&E monitoring wells MW-30I, MW-30D2, MW-31D2, MW-32I, MW-32D1, MW-32D2, MW-33I, MW-33D2, MW-34A, MW-34D1, MW-34SS, MW-34D2, MW-35D1, MW-35SS, and MW-35D2 were installed in 2021. Well locations are depicted on Figure 2.

- Semi-annual assessment monitoring sampling events were conducted in 2021 as required by § 257.95(b) and § 257.95(d)(1). Pursuant to 40 CFR 257.95(b), all Appendix IV constituents were sampled in 2021. Pursuant to 40 CFR 257.95(d)(1), semi-annual sampling of all Appendix III parameters and Appendix IV constituents detected in response to 40 CFR 257.95(b) was conducted in 2021. All sampling events were performed in accordance with 40 CFR 257.93(e). Subsequent SSLs evaluation of the November 2020 and May 2021 data were performed within 90 days of completing the sampling and analysis pursuant to § 257.93(h)(2)⁴.
- Semi-Annual Remedy Selection Progress Reports pursuant to § 257.97(a) for the period of September 13, 2020 through March 11, 2021, and for the period of March 12, 2021 through September 13, 2021 were completed and placed in the facility's operating record and posted to AESI's CCR Website.

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;

AESI operates the Petersburg Station located approximately four miles north of Petersburg, Indiana. It is located at 6925 North State Road 57. A Site Location Map is provided as Figure 1. A map showing the location of each CCR management unit, associated upgradient and downgradient CCR monitoring wells, and N&E monitoring equipment installed between 2019 and 2021 is provided as Figure 2.

§ 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.

The CCR groundwater monitoring system at the Petersburg Landfill consists of eight (8) monitoring wells: one (1) upgradient monitoring well MW-1, and seven (7) downgradient monitoring wells MW-2R, MW-3, MW-4C, MW-10, MW-11, MW-12, and MW-13.

In addition to the CCR landfill groundwater monitoring system, three (3) N&E wells (MW-14, MW-15, and MW-16) were installed in 2019. These wells were installed to characterize the nature and extent of the contamination plume and to support the CMA.

⁴ Sampling results for the November 2020 and May 2021 semi-annual assessment monitoring events are summarized in Table 3 and Table 6, respectively. Please refer to Section § 257.90(e)(4) on Page 6 of this report regarding SSL evaluation results.

Since there is a hydraulic connection between the landfill and the Ash Pond System, monitoring wells MW-20A, MW-20I, and MW-20B were installed at the facility boundary in April 2020 to satisfy § 257.95(g)(1)(iii) for the Landfill and the Ash Pond system.

To characterize the N&E of the release and any relevant site condition that may affect the remedy ultimately selected, as required by § 257.95(g)(1), additional investigation activities were initiated in 2021 as follows.

- Eight (8) stratigraphic soil borings (STR-1, STR-2, STR-3, STR-4, STR-5, STR-6, STR-7, and STR-8) were installed at the AESI's Petersburg Generating Station Landfill between June 22 and August 6, 2021. These soil borings were installed inside the current landfill boundary to obtain geologic information regarding the subsurface materials around the landfill perimeter.
- Based on the findings of the stratigraphic soil borings STR-1 through STR-8, 17 soil borings were advanced in locations proximal to the STR- borings between October 11 and November 1, 2021. Fifteen of the 17 borings were ultimately completed as monitoring wells (MW-30I, MW-30D2, MW-31D2, MW-32I, MW-32D1, MW-32D2, MW-33I, MW-33D2, MW-34A, MW-34D1, MW-34SS, MW-34D2, MW-35D1, MW-35SS, and MW-35D2). The wells were sampled in November and December 2021. MW-30I and MW-32I were dry during the November-December sampling event. These results were not finalized by the end of 2021 for inclusion in the associated 2021 Annual Report. Attempts will be made during a future sampling event(s) to obtain water samples from MW-30I and MW-32I. If the wells continue to be dry, a determination will be made as to whether they should be abandoned and/or replaced.

The location of the CCR monitoring well network and N&E wells are depicted on Figure 2. No wells were abandoned during the 2021 reporting period.

§ 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 groundwater samples collected at each CCR monitoring well and N&E well, sampling dates, and designation of whether samples were required by the detection or assessment monitoring program, or N&E. Groundwater elevation data is provided in Table 2.

Assessment Monitoring and N&E well (AP-9A, AP-10A, MW-14, MW-15, MW-16, MW-20B, MW-20I, MW-20A, MW-22, MW-23, and MW-24) groundwater analytical results for the November 2020 semi-annual sampling event are summarized in Table 3; these results were not finalized by the end of 2020 for inclusion in the associated 2021 Annual Report. N&E sampling results for the December 2020 sampling event (LB-2, LB-3, MW-22, MW-23, and MW-24) are summarized in Table 4. N&E sampling results for the March 2021 sampling event (LW-2) are summarized in Table 5. Assessment Monitoring and N&E well (AP-9A, AP-10A, MW-14, MW-15, MW-16, MW-20B, MW-20I, MW-20A, MW-22, MW-23, and MW-24) groundwater analytical results for the May 2021 sampling event are summarized

in Table 6. N&E well (MW-20B, MW-20I, MW-20A) sampling results for the September 2021 Ash Pond System sampling event are summarized in Table 7. Groundwater results for the November 2021 combined semi-annual assessment monitoring sampling event and N&E event were not finalized in 2021 and therefore are not included with this submittal.

§ 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);

AESI Petersburg operated under the assessment monitoring in accordance with § 257.95 during 2021. No transition between monitoring programs was conducted in 2021.

During 2021, statistical evaluations of the November 2020 and May 2021 analytical data were performed in order to determine whether there was a SSL of a new Appendix IV constituent detected above the relevant GWPS in accordance with § 257.95(g) and 257.93(h). The evaluations were completed in April 2021 and October 2021, respectively. Based on the evaluations, it was determined that the Appendix IV constituents that exceeded the GWPS include arsenic, lithium, and molybdenum; however, these are the same constituent SSLs previously identified. SSLs and associated wells are summarized on Page 2.

Since there were no new Appendix IV constituents identified, an additional notification was not triggered pursuant to 40 CFR 257.95(g).

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

Table 8 summarizes the groundwater protection standards established in accordance with § 257.95(d)(2) and § 257.95(h) associated with both the November 2020 and May 2021 semi-annual assessment monitoring events, respectively.

Projected key activities for the upcoming year include the following:

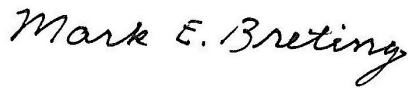
- Assessment monitoring sampling events in accordance with § 257.95 and consistent with § 257.90(e).
- Finalize November 2021 analytical data. Complete statistical evaluation of November 2021 analytical data to determine whether there is a SSL above GWPS for Appendix IV constituents in accordance with § 257.95(g) and 257.93(h). Perform SSL evaluations of final May 2022 assessment monitoring analytical data.
- Continue N&E work pursuant to § 257.95(g) including but not limited to: 1) the continuation of the ongoing landfill characterization efforts and install as required supplemental nested monitoring wells; and 2) collect groundwater samples to better define the subsurface conditions and groundwater quality within historic subsurface mine works immediately surrounding the landfill as it relates to establishing representative background conditions for the landfill and Ash Pond System, CMA, and selection of remedy support.

- Potentially conduct public meeting to discuss the results of the corrective measures assessment at least 30 days prior to the selection of remedy pursuant to § 257.96(e).
- Prepare semi-annual report(s) describing process in selecting and designing the remedy pursuant to § 257.97(a).

We appreciate the opportunity to assist with AESI's CCR Rule groundwater monitoring program at Petersburg Station's RWS Type I Landfill. Please contact either of the undersigned at 317.849.4990 if you have any questions regarding this report.

Sincerely,

ATC Group Services LLC



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



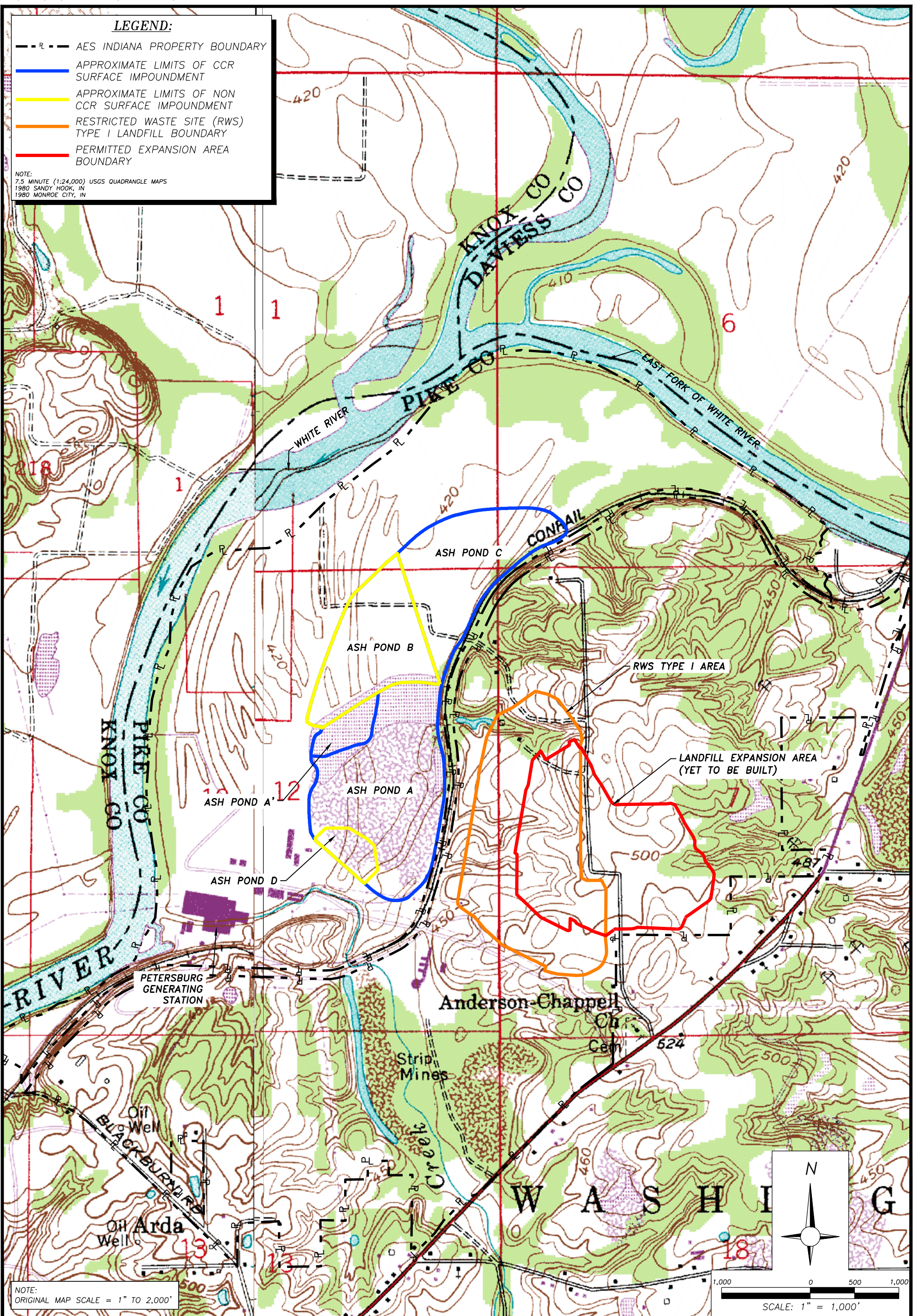
Robert T. Duncan, L.P.G.
Principal Geologist

Copies: Mr. Jeff Harter
Mr. Wil Teague
Mr. John Hendrix
Ms. Nysa Hogue

FIGURES

Figure 1: Site Location Map

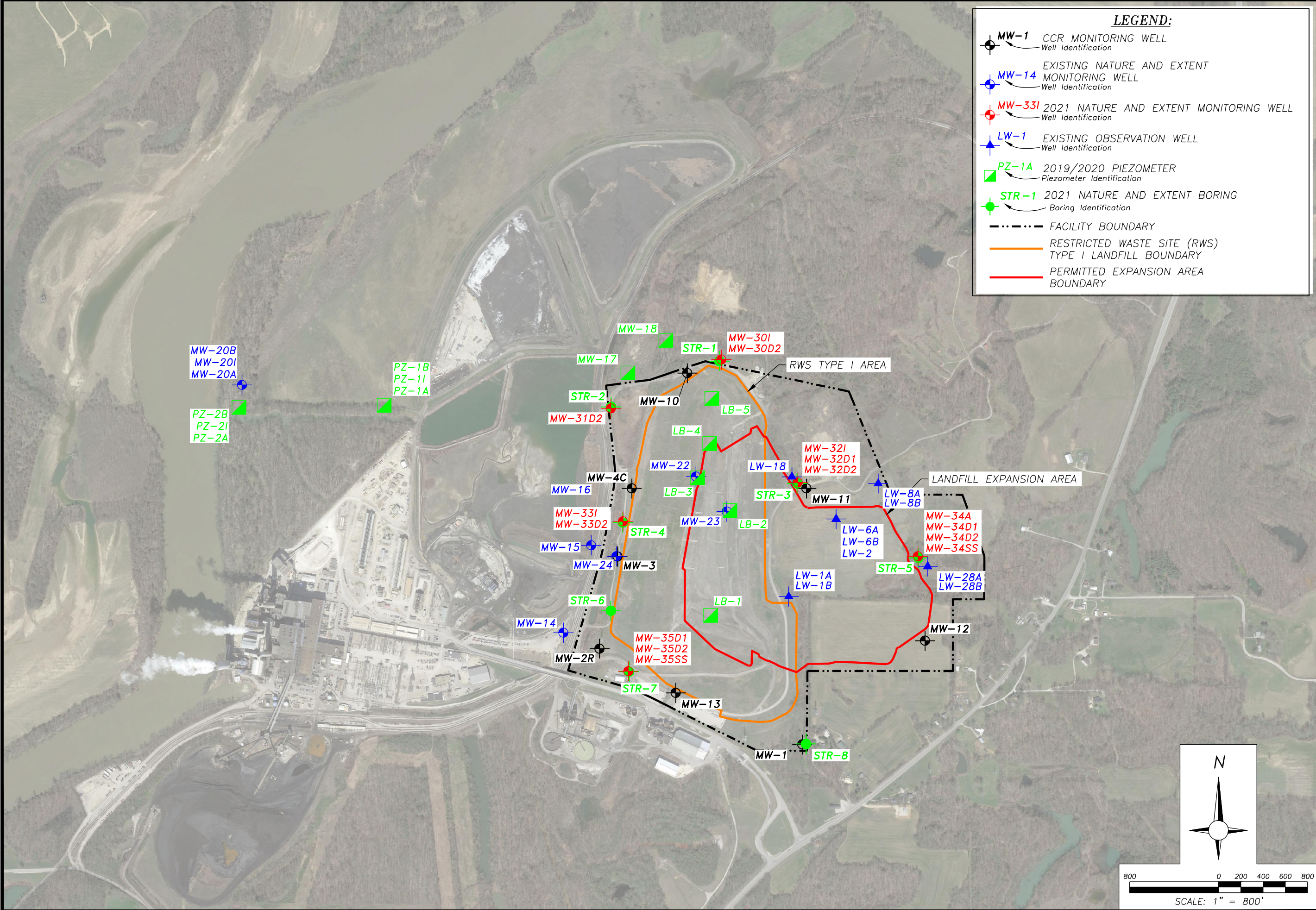
Figure 2: Groundwater Monitoring System – CCR Network Wells and N&E Wells



SITE LOCATION MAP		Project Number: 170LF01112		Drn. By: BH	
AES INDIANA PETERSBURG GENERATING STATION		Drawing File: SEE TOP LEFT		Ckd. By: MB	
RWS TYPE I LANDFILL				App'd By:	
PETERSBURG, INDIANA				Ckd. Date:	

Date: 1/22	Scale: AS SHOWN	Figure: 1
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LEGEND:

- MW-1 CCR MONITORING WELL
Well Identification
- MW-14 EXISTING NATURE AND EXTENT MONITORING WELL
Well Identification
- MW-33I 2021 NATURE AND EXTENT MONITORING WELL
Well Identification
- LW-1 EXISTING OBSERVATION WELL
Well Identification
- PZ-1A 2019/2020 PIEZOMETER
Piezometer Identification
- STR-1 2021 NATURE AND EXTENT BORING
Boring Identification
- FACILITY BOUNDARY
- RESTRICTED WASTE SITE (RWS) TYPE I LANDFILL BOUNDARY
- PERMITTED EXPANSION AREA BOUNDARY

Drn. By:	BH	Ckd. By:	MB	App'd By:		ATC
Project Number:	170LF01112	Drawing File:	SEE LOWER LEFT			

CCR GROUNDWATER MONITORING SYSTEM

AES INDIANA PETERSBURG GENERATING STATION
RWS TYPE I LANDFILL
PETERSBURG, INDIANA

Date: 1/22
Scale: AS SHOWN
Figure: 2

TABLES

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Table 2:	Groundwater Elevation Data
Table 3:	Summary of Monitoring Results – November 2020
Table 4:	Summary of Monitoring Results – December 2020
Table 5:	Summary of Monitoring Results – March 2021
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Table 7:	Summary of Monitoring Results – September 2021
Table 8:	Groundwater Protection Standards Summary – November 2020 and May 2021

Table 1
Well Sampling Summary
RWS Type I Landfill
AES Indiana
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF01112

Identification	Date Installed	Upgradient/Background, Downgradient, or Nature & Extent	Number of Samples	Sample Date	Detection or Assessment Monitoring Program
MW-1	11/21/1986	Upgradient	2	5/5/2021 11/1/2021	Assessment
MW-2 (2R)	MW-2 - 1986 MW-2R - 2/1/2017	Downgradient	2	5/5/2021 11/1/2021	Assessment
MW-3	1986	Downgradient	2	5/5/2021 11/1/2021	Assessment
MW-4C	9/29/1992	Downgradient	2	5/5/2021 11/1/2021	Assessment
MW-10	1/30/2017	Downgradient	2	5/5/2021 11/2/2021	Assessment
MW-11	1/25/2017	Downgradient	2	5/6/2021 11/2/2021	Assessment
MW-12	1/26/2017	Downgradient	2	5/6/2021 11/2/2021	Assessment
MW-13	1/31/2017	Downgradient	2	5/6/2021 11/2/2021	Assessment
LW-2	9/25/1991	Nature & Extent	1	3/4/2021	Assessment
MW-14	4/3/2019	Nature & Extent	2	5/6/2021 11/2/2021	Assessment
MW-15	4/2/2019	Nature & Extent	2	5/6/2021 11/3/2021	Assessment
MW-16	4/1/2019	Nature & Extent	2	5/7/2021 11/3/2021	Assessment
AP-9A	5/30/2019	Nature & Extent	2	5/11/2021 11/9/2021	Assessment
AP-10A	8/2/2019	Nature & Extent	2	5/10/2021 11/9/2021	Assessment
MW-20B	4/21/2020	Nature & Extent	3	5/10/2021 9/16/2021 11/8/2021	Assessment
MW-20I	4/21/2020	Nature & Extent	3	5/10/2021 9/16/2021 11/8/2021	Assessment
MW-20A	4/22/2020	Nature & Extent	3	5/10/2021 9/16/2021 11/8/2021	Assessment

Table 1
Well Sampling Summary
RWS Type I Landfill
AES Indiana
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF01112

Identification	Date Installed	Upgradient/Background, Downgradient, or Nature & Extent	Number of Samples	Sample Date	Detection or Assessment Monitoring Program
MW-22	10/26/2020	Nature & Extent	2	6/2/2021 11/9/2021	Assessment
MW-23	10/25/2020	Nature & Extent	2	6/2/2021 11/9/2021	Assessment
MW-24	10/28/2020	Nature & Extent	2	6/2/2021 11/9/2021	Assessment
MW-30I	10/27/2021	Nature & Extent	0	DRY	Assessment
MW-30D2	10/27/2021	Nature & Extent	1	12/8/2021	Assessment
MW-31D2	10/25/2021	Nature & Extent	1	11/17/2021	Assessment
MW-32I	10/19/2021	Nature & Extent	0	DRY	Assessment
MW-32D1	10/19/2021	Nature & Extent	1	11/17/2021	Assessment
MW-32D2	10/15/2021	Nature & Extent	1	12/8/2021	Assessment
MW-33I	10/21/2021	Nature & Extent	1	12/1/2021	Assessment
MW-33D2	10/21/2021	Nature & Extent	1	12/1/2021	Assessment
MW-34A	10/14/2021	Nature & Extent	1	11/16/2021	Assessment
MW-34D1	10/13/2021	Nature & Extent	1	11/16/2021	Assessment
MW-34SS	10/12/2021	Nature & Extent	1	12/8/2021	Assessment
MW-34D2	10/12/2021	Nature & Extent	1	11/16/2021	Assessment
MW-35D1	10/20/2021	Nature & Extent	1	12/1/2021	Assessment
MW-35SS	10/20/2021	Nature & Extent	1	12/9/2021	Assessment
MW-35D2	10/20/2021	Nature & Extent	1	12/1/2021	Assessment

Table 2
Groundwater Elevation Data
RWS Type I Landfill
AES Indiana
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF01112

Monitoring Well/Piezometer Location	Gauging Date	TOC Elevation (ft-MSL)	Depth to Water (ft)	Water Elevation (ft-MSL)
MW-1	5/2/2021	528.11	31.50	496.61
	10/5/2021		30.64	497.47
	10/31/2021		30.88	497.23
MW-2 (2R)	5/2/2021	455.00	14.17	440.83
	10/5/2021		18.21	436.79
	10/31/2021		18.31	436.69
MW-3	5/2/2021	450.71	9.74	440.97
	10/5/2021		10.43	440.28
	10/31/2021		10.29	440.42
MW-4C	5/2/2021	454.44	5.55	448.89
	10/5/2021		6.14	448.30
	10/31/2021		5.90	448.54
MW-10	5/2/2021	502.38	38.58	463.80
	10/5/2021		40.44	461.94
	10/31/2021		40.69	461.69
MW-11	5/2/2021	517.51	30.70	486.81
	10/5/2021		34.62	482.89
	10/31/2021		36.67	480.84
MW-12	5/2/2021	517.64	29.08	488.56
	10/5/2021		30.81	486.83
	10/31/2021		31.87	485.77
MW-13	5/2/2021	480.97	12.85	468.12
	10/5/2021		15.02	465.95
	10/31/2021		15.66	465.31
MW-14	5/2/2021	436.46	9.78	426.68
	10/5/2021		10.07	426.39
	10/31/2021		10.23	426.23
MW-15	5/2/2021	444.11	22.73	421.38
	10/5/2021		21.84	422.27
	10/31/2021		21.81	422.30

Table 2
Groundwater Elevation Data
RWS Type I Landfill
AES Indiana
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF01112

Monitoring Well/Piezometer Location	Gauging Date	TOC Elevation (ft-MSL)	Depth to Water (ft)	Water Elevation (ft-MSL)
MW-16	5/2/2021	442.78	3.08	439.70
	10/5/2021		3.75	439.03
	10/31/2021		3.26	439.52
MW-17	5/2/2021	472.33	15.91	456.42
	10/5/2021		17.45	454.88
	10/31/2021		17.68	454.65
MW-18	5/2/2021	458.27	5.58	452.69
	10/5/2021		8.12	450.15
	10/31/2021		8.08	450.19
MW-20A	9/16/2021	424.23	17.94	406.29
	10/5/2021		17.36	406.87
	10/31/2021		11.91	412.32
MW-20I	5/2/2021	424.00	9.08	414.92
	9/16/2021		18.45	405.55
	10/5/2021		17.14	406.86
	10/31/2021		11.71	412.29
MW-20B	5/2/2021	423.97	9.09	414.88
	9/16/2021		22.85	401.12
	10/5/2021		DRY	#VALUE!
	10/31/2021		11.93	412.04
MW-22	5/2/2021	561.61	84.73	476.88
	10/5/2021		85.22	476.39
	10/31/2021		85.61	476.00
MW-23	5/2/2021	564.60	82.76	481.84
	10/5/2021		82.94	481.66
	10/31/2021		83.44	481.16
MW-24	5/2/2021	452.71	12.94	439.77
	10/5/2021		13.56	439.15
	10/31/2021		13.48	439.23
MW-30D2	12/8/2021	502.82	90.09	412.73
MW-31D2	11/17/2021	453.91	33.40	420.51

Table 2
Groundwater Elevation Data
RWS Type I Landfill
AES Indiana
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF01112

Monitoring Well/Piezometer Location	Gauging Date	TOC Elevation (ft-MSL)	Depth to Water (ft)	Water Elevation (ft-MSL)
MW-32D1	11/17/2021	516.22	74.54	441.68
MW-32D2	12/2/2021	516.29	101.37	414.92
	12/8/2021		103.42	412.87
MW-33I	11/17/2021	454.81	11.26	443.55
	11/30/2021		13.55	441.26
MW-33D2	11/30/2021	454.58	41.98	412.60
MW-34A	11/16/2021	498.25	23.16	475.09
MW-34D1	11/16/2021	498.82	33.50	465.32
MW-34SS	11/16/2021	498.95	46.06	452.89
	11/30/2021		64.59	434.36
	12/8/2021		73.69	425.26
MW-34D2	11/16/2021	499.31	82.87	416.44
MW-35D1	12/1/2021	470.09	16.32	453.77
MW-35SS	11/30/2021	470.16	40.93	429.23
	12/9/2021		53.00	417.16
MW-35D2	11/30/2021	470.54	54.76	415.78
LB-1	10/5/2021	572.85	94.26	478.59
LB-2	10/5/2021	564.01	DRY	#VALUE!
LB-3	10/5/2021	559.73	81.22	478.51
LB-4	10/5/2021	563.42	85.85	477.57
LB-5	10/5/2021	559.42	DRY	#VALUE!
LW-1A	5/2/2021	504.40	16.17	488.23
	10/5/2021		16.06	488.34
	10/31/2021		16.50	487.90
LW-1B	5/2/2021	504.40	11.88	492.52
	10/5/2021		13.18	491.22
	10/31/2021		13.60	490.80
LW-2	3/4/2021	518.90	80.30	438.60
	5/2/2021		80.40	438.50
	10/5/2021		80.84	438.06
	10/31/2021		80.87	438.03

Table 2
Groundwater Elevation Data
RWS Type I Landfill
AES Indiana
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF01112

Monitoring Well/Piezometer Location	Gauging Date	TOC Elevation (ft-MSL)	Depth to Water (ft)	Water Elevation (ft-MSL)
LW-6A	5/2/2021	518.90	43.72	475.18
	10/5/2021		43.82	475.08
	10/31/2021		44.65	474.25
LW-6B	5/2/2021	518.90	DRY	#VALUE!
	10/5/2021		24.26 (DRY)	#VALUE!
	10/31/2021		DRY	#VALUE!
LW-8A	5/2/2021	524.90	62.40	462.50
	10/5/2021		63.23	461.67
	10/31/2021		63.27	461.63
LW-8B	5/2/2021	524.90	31.71	493.19
	10/5/2021		31.74	493.16
	10/31/2021		31.71	493.19
LW-28A	5/2/2021	504.40	19.35	485.05
	10/5/2021		20.59	483.81
	10/31/2021		20.99	483.41
LW-28B	5/2/2021	504.40	16.89	487.51
	10/5/2021		17.36	487.04
	10/31/2021		17.48	486.92
LW-18	5/2/2021	510.70	48.03	462.67
	10/5/2021		49.78	460.92
	10/31/2021		50.55	460.15

Notes:

TOC = Top of Casing

ft-MSL = feet above Mean Sea Level

Table 3
Summary of Monitoring Results - November 2020
RWS Type I Landfill
AES Indiana
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF01112

Well ID		AP-9A	AP-10A	MW-1	MW-2R
Sample Date		11/6/2020	11/6/2020	11/3/2020	11/3/2020
Lab ID		50272614001	50272614002	50272332001	50272328001
Static Water Elevation (ft MSL)		406.32	406.25	496.77	436.80
Field Parameters	Units				
Temperature	°C	20.66	16.48	12.67	16.62
Dissolved Oxygen, Field	mg/L	0.31	0.11	5.32	0.22
Conductivity, Field	uS/cm	2832.04	2446.73	662.35	2329.97
ORP, Field	mV	-111.94	-124.36	168.16	-70.5
pH, Field	Std. Units	7.04	7.09	6.90	6.78
Analytical Data					
Alkalinity, Total as CaCO3	mg/L	NA	NA	NA	NA
Antimony, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Arsenic, Total	ug/L	1.1	<1.0	<1.0	8.9
Barium, Total	ug/L	42.6	32.2	41.3	45
Beryllium, Total	ug/L	<0.20	<0.20	<0.20	<0.20
Boron, Total	ug/L	32200	28200	<100	2170
Cadmium, Total	ug/L	<2.0	<2.0	<2.0	<2.0
Calcium, Total	ug/L	716000	702000	127000	528000
Chloride	mg/L	131	134	4.7	75.2
Chromium, Total	ug/L	NA	NA	NA	NA
Cobalt, Total	ug/L	<1.0	<1.0	<1.0	3.1
Fluoride	mg/L	0.22	0.11	0.14	0.12
Iron, Dissolved	ug/L	NA	NA	NA	NA
Lead, Total	ug/L	<10.0	<10.0	<10.0	<10.0
Lithium, Dissolved	ug/L	NA	NA	NA	NA
Lithium, Total	ug/L	21.4	<20.0	<20.0	522.0
Magnesium, Total	ug/L	NA	NA	NA	NA
Manganese, Dissolved	ug/L	NA	NA	NA	NA
Manganese, Total	ug/L	NA	NA	NA	NA
Mercury	ug/L	NA	NA	NA	NA
Molybdenum, Dissolved	ug/L	NA	NA	NA	NA
Molybdenum, Total	ug/L	2190	721	<10.0	12.8
pH at 25 Degrees C	Std. Units	7.1	7.0	7.5	7.2
Potassium, Total	ug/L	NA	NA	NA	NA
Radium-226	pCi/L	0.408	<0.588	0.495	0.511
Radium-228	pCi/L	4.57	1.18	0.633	<1.01
Selenium, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Sodium, Total	ug/L	NA	NA	NA	NA
Sulfate	mg/L	1710		191	1480
Sulfide	mg/L	NA	NA	NA	NA
Thallium, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L	2860	2680	580	2320
Total Organic Carbon	mg/L	NA	NA	NA	NA
Total Radium	pCi/L	4.98	1.18	1.13	<1.62

Notes:
ft MSL: Elevation, feet mean sea level
°C: Degrees celcius
uS/cm: microsiemen per centimeter
umhos/cm: micromhos per centimeter
NA: Not analyzed
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 3

Summary of Monitoring Results - November 2020

RWS Type I Landfill

AES Indiana

Petersburg Generating Station

Petersburg, Indiana

ATC Project No. 170LF01112

Well ID		MW-3	MW-4C	MW-10	MW-11
Sample Date		11/3/2020	11/3/2020	11/4/2020	11/4/2020
Lab ID		50272328002	50272328003	50272332002	50272332003
Static Water Elevation (ft MSL)		440.84	449.24	461.94	479.28
Field Parameters	Units				
Temperature	°C	17.14	17.47	16.60	17.37
Dissolved Oxygen, Field	mg/L	0.13	0.48	0.72	6.89
Conductivity, Field	uS/cm	2025.11	2411.50	2475.62	885.37
ORP, Field	mV	7.23	83.86	-102.56	70.2
pH, Field	Std. Units	7.37	7.05	6.97	7.09
Analytical Data					
Alkalinity, Total as CaCO3	mg/L	NA	NA	NA	NA
Antimony, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Arsenic, Total	ug/L	20.5	<1.0	104	10.7
Barium, Total	ug/L	39.4	30.7	69.8	89.2
Beryllium, Total	ug/L	<0.20	<0.20	0.51	0.89
Boron, Total	ug/L	989	4090	25600	1060
Cadmium, Total	ug/L	<2.0	<2.0	<2.0	<2.0
Calcium, Total	ug/L	346000	577000	466000	156000
Chloride	mg/L	80.3	41.3	99.5	1.7
Chromium, Total	ug/L	NA	NA	NA	NA
Cobalt, Total	ug/L	2.1	1.0	3.5	3.1
Fluoride	mg/L	0.17	0.12	0.52	0.16
Iron, Dissolved	ug/L	NA	NA	NA	NA
Lead, Total	ug/L	<10.0	<10.0	<10.0	10
Lithium, Dissolved	ug/L	NA	NA	NA	NA
Lithium, Total	ug/L	1760	287	40	<20.0
Magnesium, Total	ug/L	NA	NA	NA	NA
Manganese, Dissolved	ug/L	NA	NA	NA	NA
Manganese, Total	ug/L	NA	NA	NA	NA
Mercury	ug/L	NA	NA	NA	NA
Molybdenum, Dissolved	ug/L	NA	NA	NA	NA
Molybdenum, Total	ug/L	549	<10.0	14.9	<10.0
pH at 25 Degrees C	Std. Units	7.6	7.2	7.2	7.5
Potassium, Total	ug/L	NA	NA	NA	NA
Radium-226	pCi/L	0.461	0.423	0.737	0.589
Radium-228	pCi/L	<0.907	0.799	<0.991	0.75
Selenium, Total	ug/L	<1.0	<1.0	<1.0	2.5
Sodium, Total	ug/L	NA	NA	NA	NA
Sulfate	mg/L	1180	1490.0	1040.0	407
Sulfide	mg/L	NA	NA	NA	NA
Thallium, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L	1820	2380	2220	776
Total Organic Carbon	mg/L	NA	NA	NA	NA
Total Radium	pCi/L	0.777	1.22	1.16	1.34

Notes:

ft MSL: Elevation, feet mean sea level

°C: Degrees celcius

uS/cm: microsiemen per centimeter

umhos/cm: micromhos per centimeter

NA: Not analyzed

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 3
 Summary of Monitoring Results - November 2020
 RWS Type I Landfill
 AES Indiana
 Petersburg Generating Station
 Petersburg, Indiana
 ATC Project No. 170LF01112

Well ID		MW-12	MW-13	MW-14	MW-15
Sample Date		11/4/2020	11/4/2020	11/4/2020	11/4/2020
Lab ID		50272332004	50272332005	50272334001	50272334002
Static Water Elevation (ft MSL)		486.46	466.20	426.68	421.38
Field Parameters	Units				
Temperature	°C	16.65	16.78	18.84	19.49
Dissolved Oxygen, Field	mg/L	9.21	2.54	0.11	0.51
Conductivity, Field	uS/cm	365.05	2128.64	1003.75	2026.60
ORP, Field	mV	86.4	83.81	-61.37	-73.3
pH, Field	Std. Units	7.10	8.51	6.56	7.87
Analytical Data					
Alkalinity, Total as CaCO3	mg/L	NA	NA	NA	NA
Antimony, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Arsenic, Total	ug/L	<1.0	<1.0	2.9	<1.0
Barium, Total	ug/L	31.3	25	66.9	89.3
Beryllium, Total	ug/L	<0.20	<0.20	<0.20	<0.20
Boron, Total	ug/L	<100	2530	746	1640
Cadmium, Total	ug/L	<2.0	<2.0	<2.0	<2.0
Calcium, Total	ug/L	50800	435000	181000	306000
Chloride	mg/L	10.7	11.5	5.2	94.6
Chromium, Total	ug/L	NA	NA	NA	NA
Cobalt, Total	ug/L	<1.0	<1.0	1.4	<1.0
Fluoride	mg/L	0.15	0.8	<0.10	<0.10
Iron, Dissolved	ug/L	NA	NA	NA	NA
Lead, Total	ug/L	<10.0	<10.0	<10.0	<10.0
Lithium, Dissolved	ug/L	NA	NA	NA	NA
Lithium, Total	ug/L	<20.0	238.0	<20.0	844
Magnesium, Total	ug/L	NA	NA	NA	NA
Manganese, Dissolved	ug/L	NA	NA	NA	NA
Manganese, Total	ug/L	NA	NA	NA	NA
Mercury	ug/L	NA	NA	NA	NA
Molybdenum, Dissolved	ug/L	NA	NA	NA	NA
Molybdenum, Total	ug/L	<10.0	76.2	<10.0	76.6
pH at 25 Degrees C	Std. Units	7.5	7.5	7.4	7.4
Potassium, Total	ug/L	NA	NA	NA	NA
Radium-226	pCi/L	0.299	0.36	0.287	1.02
Radium-228	pCi/L	0.536	<1.01	<1.11	0.898
Selenium, Total	ug/L	<1.0	4.7	<1.0	<1.0
Sodium, Total	ug/L	NA	NA	NA	NA
Sulfate	mg/L	15.3	1490	269	974
Sulfide	mg/L	NA	NA	NA	NA
Thallium, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L	225	2280	750	1680
Total Organic Carbon	mg/L	NA	NA	NA	NA
Total Radium	pCi/L	0.835	<1.13	<1.55	1.92

Notes:
 ft MSL: Elevation, feet mean sea level
 °C: Degrees celcius
 uS/cm: microsiemen per centimeter
 umhos/cm: micromhos per centimeter
 NA: Not analyzed
 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 3
Summary of Monitoring Results - November 2020
RWS Type I Landfill
AES Indiana
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF01112

Well ID		MW-16	MW-20A	MW-20B	MW-20I
Sample Date		11/4/2020	11/6/2020	11/6/2020	11/6/2020
Lab ID		50272334003	50272614006	50272614008	50272614007
Static Water Elevation (ft MSL)		439.70	408.62	408.44	408.59
Field Parameters	Units				
Temperature	°C	19.16	15.20	15.40	14.88
Dissolved Oxygen, Field	mg/L	0.17	0.62	0.26	0.28
Conductivity, Field	uS/cm	2838.00	1598.12	784.13	568.01
ORP, Field	mV	-83.69	-97.98	66.14	9.17
pH, Field	Std. Units	7.18	6.98	6.67	7.02
Analytical Data					
Alkalinity, Total as CaCO3	mg/L	NA	NA	NA	NA
Antimony, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Arsenic, Total	ug/L	3.4	1.8	1.3	<1.0
Barium, Total	ug/L	75.9	34.6	136	60
Beryllium, Total	ug/L	<0.20	<0.20	<0.20	<0.20
Boron, Total	ug/L	3170	13900	621	409
Cadmium, Total	ug/L	<2.0	<2.0	<2.0	<2.0
Calcium, Total	ug/L	405000	401000	166000	111000
Chloride	mg/L	62.4	62.4	16.4	8.9
Chromium, Total	ug/L	NA	NA	NA	NA
Cobalt, Total	ug/L	1.0	<1.0	2.0	<1.0
Fluoride	mg/L	<0.10	<0.10	<0.10	<0.10
Iron, Dissolved	ug/L	NA	NA	NA	NA
Lead, Total	ug/L	<10.0	<10.0	<10.0	<10.0
Lithium, Dissolved	ug/L	NA	NA	NA	NA
Lithium, Total	ug/L	2470	<20.0	<20.0	<20.0
Magnesium, Total	ug/L	NA	NA	NA	NA
Manganese, Dissolved	ug/L	NA	NA	NA	NA
Manganese, Total	ug/L	NA	NA	NA	NA
Mercury	ug/L	NA	NA	NA	NA
Molybdenum, Dissolved	ug/L	NA	NA	NA	NA
Molybdenum, Total	ug/L	521	282	<10.0	<10.0
pH at 25 Degrees C	Std. Units	7.4	7.0	6.8	7.2
Potassium, Total	ug/L	NA	NA	NA	NA
Radium-226	pCi/L	0.971	0.379	<0.579	0.258
Radium-228	pCi/L	1.62	1.55	<0.987	0.561
Selenium, Total	ug/L	<1.0	<1.0	2.7	<1.0
Sodium, Total	ug/L	NA	NA	NA	NA
Sulfate	mg/L	1690	935	81.2	38.7
Sulfide	mg/L	NA	NA	NA	NA
Thallium, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L	2530	1630	558	376
Total Organic Carbon	mg/L	NA	NA	NA	NA
Total Radium	pCi/L	2.59	1.93	<1.57	0.819

Notes:
ft MSL: Elevation, feet mean sea level
°C: Degrees celcius
uS/cm: microsiemen per centimeter
umhos/cm: micromhos per centimeter
NA: Not analyzed
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 3
 Summary of Monitoring Results - November 2020
 RWS Type I Landfill
 AES Indiana
 Petersburg Generating Station
 Petersburg, Indiana
 ATC Project No. 170LF01112

Well ID		MW-22	MW-23	MW-24
Sample Date		11/24/2020	11/24/2020	11/24/2020
Lab ID		50274162001	50274162002	50274162003
Static Water Elevation (ft MSL)		478.91	483.85	440.15
Field Parameters	Units			
Temperature	°C	15.43	14.61	15.90
Dissolved Oxygen, Field	mg/L	8.26	5.92	0.0
Conductivity, Field	uS/cm	3927.50	4145.30	2258.00
ORP, Field	mV	108.9	-56.8	32.2
pH, Field	Std. Units	7.70	7.60	7.25
Analytical Data				
Alkalinity, Total as CaCO3	mg/L	339	154	169
Antimony, Total	ug/L	<1.0	<1.0	<1.0
Arsenic, Total	ug/L	5.6	3.9	<1.0
Barium, Total	ug/L	116	52.3	45.9
Beryllium, Total	ug/L	<0.20	0.26	<0.20
Boron, Total	ug/L	2550	109	999
Cadmium, Total	ug/L	<2.0	<2.0	<2.0
Calcium, Total	ug/L	356000	64600	309000
Chloride	mg/L	196	11.4	96.7
Chromium, Total	ug/L	NA	NA	NA
Cobalt, Total	ug/L	2.8	2.3	2.7
Fluoride	mg/L	0.15	0.20	<0.10
Iron, Dissolved	ug/L	<100	<100	114
Lead, Total	ug/L	<10.0	<10.0	<10.0
Lithium, Dissolved	ug/L	3620	<20.0	1600
Lithium, Total	ug/L	3480	<20.0	1600
Magnesium, Total	ug/L	28900	18000	39900
Manganese, Dissolved	ug/L	2130	101	1060
Manganese, Total	ug/L	2290	247	1150
Mercury	ug/L	NA	NA	NA
Molybdenum, Dissolved	ug/L	269	<10.0	253
Molybdenum, Total	ug/L	285	<10.0	270
pH at 25 Degrees C	Std. Units	7.3	7.7	7.3
Potassium, Total	ug/L	374000	2420	153000
Radium-226	pCi/L	0.776	<1.84	0.766
Radium-228	pCi/L	1.97	0.628	<1.12
Selenium, Total	ug/L	1.3	2.3	<1.0
Sodium, Total	ug/L	317000	14100	95500
Sulfate	mg/L	1650	43.3	1010
Sulfide	mg/L	<0.10	<0.10	<0.10
Thallium, Total	ug/L	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L	2890	249	1770
Total Organic Carbon	mg/L	5.2	<1.0	<1.0
Total Radium	pCi/L	2.75	<3.00	1.23

Notes:
 ft MSL: Elevation, feet mean sea level
 °C: Degrees celcius
 uS/cm: microsiemen per centimeter
 umhos/cm: micromhos per centimeter
 NA: Not analyzed
 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
 Summary of Monitoring Results - December 2020
 RWS Type I Landfill
 AES Indiana
 Petersburg Generating Station
 Petersburg, Indiana
 ATC Project No. 170LF01112

Well ID		LB-2	LB-3	MW-22	MW-23
Sample Date		12/17/2020	12/17/2020	12/17/2020	12/16/2020
Lab ID		50276176004	50276176005	50276176001	50276176002
Static Water Elevation (ft MSL)		485.06	479.53	477.58	483.29
Field Parameters	Units				
Temperature	°C	14.66	14.50	13.60	10.87
Dissolved Oxygen, Field	mg/L	1.379	1.472	2.451	11.94
Conductivity, Field	uS/cm	3173.68	3708.82	3210.59	411.61
ORP, Field	mV	-314.7	-202.52	-20.80	71.9
pH, Field	Std. Units	10.85	9.76	7.02	7.45
Analytical Data					
Alkalinity, Total as CaCO3	mg/L	440	194	331	152
Antimony, Total	ug/L	<5.0	11.2	<1.0	<1.0
Arsenic, Total	ug/L	890	314	9.1	2.2
Barium, Total	ug/L	1970	674	114	42
Beryllium, Total	ug/L	132	67.5	0.95	<0.2
Boron, Total	ug/L	4810	5370	2450	<100
Cadmium, Total	ug/L	12.5	7.2	<2.0	<2.0
Calcium, Total	ug/L	3180000	2320000	353000	67400
Chloride	mg/L	364	120	185	9.8
Chromium, Total	ug/L	507	266	13.8	<10.0
Cobalt, Total	ug/L	233	43	4.5	1.5
Fluoride	mg/L	<0.10	<0.10	<0.10	0.18
Iron, Dissolved	ug/L	4580	<100	3840	<100
Lead, Total	ug/L	520	122	<10.0	<10.0
Lithium, Dissolved	ug/L	5230	10200	4080	<20.0
Lithium, Total	ug/L	5020	10100	3540	<20.0
Magnesium, Total	ug/L	166000	71900	25200	19000
Manganese, Dissolved	ug/L	103	27.8	2560	22.7
Mercury	ug/L	2.4	<2.0	<2.0	<2.0
Molybdenum, Dissolved	ug/L	8430	11900	205	<10.0
Molybdenum, Total	ug/L	4550	11300	329	<10.0
pH at 25 Degrees C	Std. Units	11.2	10.7	7.2	7.9
Potassium, Total	ug/L	704000	437000	368000	1880
Selenium, Total	ug/L	81.2	26.0	1.2	<1.0
Sodium, Total	ug/L	366000	285000	288000	7000
Sulfate	mg/L	1240	2030	1590	29.3
Sulfide	mg/L	<0.10	<0.10	<0.10	<0.10
Thallium, Total	ug/L	31.3	19.2	<1.0	<1.0
Total Dissolved Solids	mg/L	2670	3660	3000	234
Total Organic Carbon	mg/L	<100	<4.0	4.3	<1.0

Notes:
 ft MSL: Elevation, feet mean sea level
 °C: Degrees celcius
 uS/cm: microsiemen per centimeter
 umhos/cm: micromhos per centimeter
 NA: Not Analyzed
 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
 Summary of Monitoring Results - December 2020
 RWS Type I Landfill
 AES Indiana
 Petersburg Generating Station
 Petersburg, Indiana
 ATC Project No. 170LF01112

Well ID		MW-24
Sample Date		12/17/2020
Lab ID		50276176003
Static Water Elevation (ft MSL)		440.10
Field Parameters	Units	
Temperature	°C	12.96
Dissolved Oxygen, Field	mg/L	0.07
Conductivity, Field	uS/cm	2209.8
ORP, Field	mV	85.3
pH, Field	Std. Units	6.98
Analytical Data		
Alkalinity, Total as CaCO3	mg/L	170
Antimony, Total	ug/L	<1.0
Arsenic, Total	ug/L	<1.0
Barium, Total	ug/L	43.9
Beryllium, Total	ug/L	<0.2
Boron, Total	ug/L	929
Cadmium, Total	ug/L	<2.0
Calcium, Total	ug/L	308000
Chloride	mg/L	92.2
Chromium, Total	ug/L	<10.0
Cobalt, Total	ug/L	2.6
Fluoride	mg/L	<0.10
Iron, Dissolved	ug/L	102
Lead, Total	ug/L	<10.0
Lithium, Dissolved	ug/L	1580
Lithium, Total	ug/L	1550
Magnesium, Total	ug/L	37500
Manganese, Dissolved	ug/L	1080
Mercury	ug/L	<2.0
Molybdenum, Dissolved	ug/L	264
Molybdenum, Total	ug/L	252
pH at 25 Degrees C	Std. Units	7.3
Potassium, Total	ug/L	144000
Selenium, Total	ug/L	<1.0
Sodium, Total	ug/L	93900
Sulfate	mg/L	994
Sulfide	mg/L	<0.10
Thallium, Total	ug/L	<1.0
Total Dissolved Solids	mg/L	1770
Total Organic Carbon	mg/L	<1.0

Notes:

ft MSL: Elevation, feet mean sea level

°C: Degrees celcius

uS/cm: microsiemen per centimeter

umhos/cm: micromhos per centimeter

NA: Not Analyzed

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 5
Summary of Monitoring Results - March 2021
RWS Type I Landfill
AES Indiana
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF01112

Well ID		LW-2
Sample Date		3/4/2021
Lab ID		50281349001
Static Water Elevation (ft MSL)		438.60
Field Parameters	Units	
Temperature	°C	Not Available
Dissolved Oxygen, Field	mg/L	0.41
Conductivity, Field	uS/cm	720
ORP, Field	mV	-87.3
pH, Field	Std. Units	7.17
Analytical Data		
Arsenic, Dissolved	ug/L	3.2
Arsenic, Total	ug/L	3.3
Barium, Dissolved	ug/L	118
Barium, Total	ug/L	123
Beryllium, Dissolved	ug/L	<0.20
Beryllium, Total	ug/L	<0.20
Boron, Dissolved	ug/L	<100
Boron, Total	ug/L	<100
Cadmium, Dissolved	ug/L	<0.20
Cadmium, Total	ug/L	<0.20
Calcium, Dissolved	ug/L	99200
Calcium, Total	ug/L	103000
Chloride	mg/L	0.94
Cobalt, Dissolved	ug/L	3.2
Cobalt, Total	ug/L	4.6
Fluoride	mg/L	0.13
Lead, Dissolved	ug/L	<1.0
Lead, Total	ug/L	<1.0
Lithium, Dissolved	ug/L	<20.0
Lithium, Total	ug/L	<20.0
Molybdenum, Dissolved	ug/L	3.9
Molybdenum, Total	ug/L	3.9
Radium-226	pCi/L	1.05
Radium-228	pCi/L	0.609
Selenium, Dissolved	ug/L	<1.0
Selenium, Total	ug/L	<1.0
Sulfate	mg/L	150
Total Dissolved Solids	mg/L	483
Total Radium	pCi/L	1.66

Notes:
ft MSL: Elevation, feet mean sea level
°C: Degrees celcius
uS/cm: microsiemen per centimeter
umhos/cm: micromhos per centimeter
NA: Not Analyzed
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 6
Summary of Monitoring Results - May 2021
RWS Type I Landfill
AES Indiana
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF01112

Well ID		AP-9A	AP-10A	MW-1	MW-2R
Sample Date		5/11/2021	5/10/2021	5/5/2021	5/5/2021
Lab ID		50287228001	50287134001	50286945001	50286944001
Static Water Elevation (ft MSL)		436.83	422.41	496.61	440.83
Field Parameters	Units				
Temperature	°C	18.29	13.22	13.86	14.01
Dissolved Oxygen, Field	mg/L	0.22	0.14	8.05	0.15
Conductivity, Field	uS/cm	2972.9	2775	927.59	2960.1
ORP, Field	mV	-116.3	-79.8	19.8	-27
pH, Field	Std. Units	7.31	7.31	6.98	6.85
Analytical Data					
Alkalinity, Total as CaCO3	mg/L	52.9	52.2	304	124
Alkalinity,Bicarbonate (CaCO3)	mg/L	52.9	52.2	304	124
Alkalinity,Carbonate (CaCO3)	mg/L	<2.0	<2.0	<2.0	<2.0
Aluminum, Total	ug/L	<200	<200	<200	<200
Antimony, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Arsenic, Total	ug/L	<1.0	<1.0	<1.0	6.2
Barium, Total	ug/L	42.1	33.5	52.2	44.6
Beryllium, Total	ug/L	<0.20	<0.20	<0.20	<0.20
Boron, Total	ug/L	32200	29200	146	1900
Cadmium, Total	ug/L	<2.0	<2.0	<2.0	<2.0
Calcium, Total	ug/L	748000	698000	153000	552000
Chloride	mg/L	143	142	5.9	90.8
Chromium, Total	ug/L	NA	NA	<10.0	<10.0
Cobalt, Total	ug/L	<1.0	<1.0	<1.0	2.9
Dissolved Organic Carbon	mg/L	<1.0	1.4	<1.0	<1.0
Fluoride	mg/L	0.15	<0.10	0.1	<0.10
Iron, Ferrous	mg/L	4.4	3.9	<0.20	<0.20
Iron, Total	ug/L	6210	7490	<100	8420
Lead, Total	ug/L	<10.0	<10.0	<10.0	<10.0
Lithium, Total	ug/L	<200	<20.0	<20.0	890
Magnesium, Total	ug/L	17600	8840	41100	55400
Manganese, Dissolved	ug/L	1590	2370	<10	6810
Manganese, Total	ug/L	1660	2380	<10	6600
Mercury	ug/L	NA	NA	<2.0	<2.0
Molybdenum, Dissolved	ug/L	2030	742	<10.0	10.8
Molybdenum, Total	ug/L	2130	758	<10.0	10.3
Nitrogen, Nitrate	mg/L	<0.10	<0.10	5.9	<0.10
Nitrogen, Nitrite	mg/L	<0.10	<0.10	<0.5	<0.10
pH at 25 Degrees C	Std. Units	7.0	8.3	7.4	7.6
Phosphate as P04	mg/L	0.46	0.21	<0.15	0.25
Potassium, Total	ug/L	37000	16100	1350	96600
Radium-226	pCi/L	<0.812	0.572	<0.932	<0.946
Radium-228	pCi/L	0.747	0.767	<0.706	1.52
Selenium, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Silica, Total	ug/L	13500	11500	21600	15700
Sodium, Total	ug/L	47400	55600	3740	133000
Sulfate	mg/L	1680	1570	214	1760
Sulfide	mg/L	<0.10	<0.10	<0.10	<0.10
Thallium, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L	2820	2600	639	2580
Total Organic Carbon	mg/L	<1.0	1.4	<1.0	<1.0
Total Radium	pCi/L	0.977	1.34	<1.64	1.59

Notes:
ft MSL: Elevation, feet mean sea level
°C: Degrees celcius
uS/cm: microsiemen per centimeter
umhos/cm: micromhos per centimeter
NA: Not analyzed
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 6
Summary of Monitoring Results - May 2021
RWS Type I Landfill
AES Indiana
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF01112

Well ID		MW-3	MW-4C	MW-10	MW-11
Sample Date		5/5/2021	5/5/2021	5/5/2021	5/6/2021
Lab ID		50286944002	50286944003	50286945002	50286945003
Static Water Elevation (ft MSL)		440.97	448.89	463.80	486.81
Field Parameters	Units				
Temperature	°C	16.41	14.25	16.45	14.79
Dissolved Oxygen, Field	mg/L	0.17	1.06	1.2	6.84
Conductivity, Field	uS/cm	2468.9	2491.9	3097.9	1133.2
ORP, Field	mV	89.1	55.1	-115.1	73.2
pH, Field	Std. Units	7.21	6.79	7.04	6.98
Analytical Data					
Alkalinity, Total as CaCO3	mg/L	74.9	309	598	142
Alkalinity,Bicarbonate (CaCO3)	mg/L	74.9	309	598	142
Alkalinity,Carbonate (CaCO3)	mg/L	<2.0	<2.0	<2.0	<2.0
Aluminum, Total	ug/L	<200	<200	6720	<200
Antimony, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Arsenic, Total	ug/L	17.0	<1.0	96.4	<1.0
Barium, Total	ug/L	37.3	28.6	120	42.8
Beryllium, Total	ug/L	<0.20	<0.20	1.3	<0.20
Boron, Total	ug/L	1270	3620	36300	1230
Cadmium, Total	ug/L	<2.0	<2.0	<2.0	<2.0
Calcium, Total	ug/L	481000	571000	646000	193000
Chloride	mg/L	55.7	42.8	104	1.8
Chromium, Total	ug/L	<10.0	<10.0	11.1	<10.0
Cobalt, Total	ug/L	2.1	1.2	5.5	<1.0
Dissolved Organic Carbon	mg/L	<1.0	1.7	9.2	<1.0
Fluoride	mg/L	0.14	<0.10	0.42	0.12
Iron, Ferrous	mg/L	<0.20	<0.20	0.42	<0.20
Iron, Total	ug/L	<100	<100	38900	264
Lead, Total	ug/L	<10.0	<10.0	10.5	<10.0
Lithium, Total	ug/L	1820	359	40.9	<20.0
Magnesium, Total	ug/L	7360	55700	101000	54600
Manganese, Dissolved	ug/L	907	2150	3430	<10
Manganese, Total	ug/L	913	1900	3650	<10
Mercury	ug/L	<2.0	<2.0	<2.0	<2.0
Molybdenum, Dissolved	ug/L	519	<10.0	23.2	<10.0
Molybdenum, Total	ug/L	532	<10.0	27.5	<10.0
Nitrogen, Nitrate	mg/L	<0.10	6.6	<0.10	2.0
Nitrogen, Nitrite	mg/L	<0.10	<0.2	<0.10	<0.10
pH at 25 Degrees C	Std. Units	7.5	6.8	7.4	7.3
Phosphate as P04	mg/L	0.16	<0.15	2.0	0.21
Potassium, Total	ug/L	253000	52800	40800	<1000
Radium-226	pCi/L	1.24	<0.967	0.646	<0.664
Radium-228	pCi/L	1.27	2.07	0.77	<1.11
Selenium, Total	ug/L	<1.0	<1.0	1.3	3.4
Silica, Total	ug/L	8620	19300	40300	19700
Sodium, Total	ug/L	105000	89600	82200	3620
Sulfate	mg/L	1590	1430	1460	532
Sulfide	mg/L	<0.10	<0.10	<0.10	<0.10
Thallium, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L	2230	2250	2680	862
Total Organic Carbon	mg/L	<1.0	1.3	8.4	<1.0
Total Radium	pCi/L	2.51	2.09	1.42	<1.77

Notes:
ft MSL: Elevation, feet mean sea level
°C: Degrees celcius
uS/cm: microsiemen per centimeter
umhos/cm: micromhos per centimeter
NA: Not analyzed
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 6
Summary of Monitoring Results - May 2021
RWS Type I Landfill
AES Indiana
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF01112

Well ID		MW-12	MW-13	MW-14	MW-15
Sample Date		5/6/2021	5/6/2021	5/6/2021	5/6/2021
Lab ID		50286945004	50286945005	50286948001	50286948002
Static Water Elevation (ft MSL)		488.56	468.12	426.68	421.38
Field Parameters	Units				
Temperature	°C	14.29	11.61	14.28	16.64
Dissolved Oxygen, Field	mg/L	10.04	10.18	0.13	0.39
Conductivity, Field	uS/cm	418.56	1756.6	961.9	2146.4
ORP, Field	mV	71.6	93.2	-51	-42.5
pH, Field	Std. Units	7.05	7.25	6.71	7.04
Analytical Data					
Alkalinity, Total as CaCO3	mg/L	160	163	328	186
Alkalinity,Bicarbonate (CaCO3)	mg/L	160	163	328	186
Alkalinity,Carbonate (CaCO3)	mg/L	<2.0	<2.0	<2.0	<2.0
Aluminum, Total	ug/L	3280	<200	319	<200
Antimony, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Arsenic, Total	ug/L	3.0	<1.0	9.4	<1.0
Barium, Total	ug/L	42.2	17.4	73	85.6
Beryllium, Total	ug/L	<0.20	<0.20	<0.20	<0.20
Boron, Total	ug/L	<100	1660	571	1580
Cadmium, Total	ug/L	<2.0	<2.0	<2.0	<2.0
Calcium, Total	ug/L	52800	476000	164000	309000
Chloride	mg/L	9.9	2.0	4.3	99.1
Chromium, Total	ug/L	<10.0	<10.0	NA	NA
Cobalt, Total	ug/L	1.3	<1.0	1.3	<1.0
Dissolved Organic Carbon	mg/L	<1.0	<1.0	<1.0	<1.0
Fluoride	mg/L	0.12	0.65	<0.10	<0.10
Iron, Ferrous	mg/L	<0.20	<0.20	<0.20	0.49
Iron, Total	ug/L	3260	<100	9760	2400
Lead, Total	ug/L	<10.0	<10.0	<10.0	<10.0
Lithium, Total	ug/L	<20.0	<20.0	<20.0	897
Magnesium, Total	ug/L	21100	14000	36900	44600
Manganese, Dissolved	ug/L	<10	<10	1560	597
Manganese, Total	ug/L	60.5	<10	1580	588
Mercury	ug/L	<2.0	<2.0	NA	NA
Molybdenum, Dissolved	ug/L	<10.0	45.8	<10.0	81.5
Molybdenum, Total	ug/L	<10.0	45.3	<10.0	80
Nitrogen, Nitrate	mg/L	8.4	<0.10	<0.10	<0.10
Nitrogen, Nitrite	mg/L	<1.0	<0.10	<0.10	<0.10
pH at 25 Degrees C	Std. Units	7.3	7.5	7.0	7.1
Phosphate as P04	mg/L	<0.15	<0.15	2.0	<0.15
Potassium, Total	ug/L	1530	6090	1050	82800
Radium-226	pCi/L	<0.795	<0.853	0.724	0.64
Radium-228	pCi/L	<1.03	<1.13	0.689	1.22
Selenium, Total	ug/L	<1.0	8.4	<1.0	<1.0
Silica, Total	ug/L	30000	14000	13000	15200
Sodium, Total	ug/L	3860	2120	5900	94200
Sulfate	mg/L	15.1	1020	224	1030
Sulfide	mg/L	<0.10	<0.10	<0.10	<0.10
Thallium, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L	223	1640	674	1860
Total Organic Carbon	mg/L	<1.0	<1.0	<1.0	<1.0
Total Radium	pCi/L	<1.83	<1.98	1.41	1.86

Notes:
ft MSL: Elevation, feet mean sea level
°C: Degrees celcius
uS/cm: microsiemen per centimeter
umhos/cm: micromhos per centimeter
NA: Not analyzed
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 6
Summary of Monitoring Results - May 2021
RWS Type I Landfill
AES Indiana
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF01112

Well ID		MW-16	MW-20A	MW-20I	MW-20B
Sample Date		5/7/2021	5/10/2021	5/10/2021	5/10/2021
Lab ID		50287017001	50287134002	50287134003	50287134004
Static Water Elevation (ft MSL)		439.70	424.23	424.00	423.97
Field Parameters	Units				
Temperature	°C	14.35	13.57	13.25	12.16
Dissolved Oxygen, Field	mg/L	1.45	0.56	0.13	0.44
Conductivity, Field	uS/cm	2817.4	1900.2	668.64	984.98
ORP, Field	mV	-82.8	-79.7	-28	7.2
pH, Field	Std. Units	7.24	7.14	7.07	6.73
Analytical Data					
Alkalinity, Total as CaCO3	mg/L	149	176	316	458
Alkalinity,Bicarbonate (CaCO3)	mg/L	149	176	316	458
Alkalinity,Carbonate (CaCO3)	mg/L	<2.0	<2.0	<2.0	<2.0
Aluminum, Total	ug/L	791	293	<200	374
Antimony, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Arsenic, Total	ug/L	6.0	1.8	<1.0	<1.0
Barium, Total	ug/L	67.9	38.4	57.9	116
Beryllium, Total	ug/L	<2.0	<0.20	<0.20	<0.20
Boron, Total	ug/L	2930	16200	265	576
Cadmium, Total	ug/L	<2.0	<2.0	<2.0	<2.0
Calcium, Total	ug/L	358000	454000	113000	180000
Chloride	mg/L	90.7	73.1	6.6	13.4
Chromium, Total	ug/L	NA	NA	NA	NA
Cobalt, Total	ug/L	<1.0	<1.0	1.1	<1.0
Dissolved Organic Carbon	mg/L	<1.0	<1.0	<1.0	<1.0
Fluoride	mg/L	<0.10	<0.10	<0.10	<0.10
Iron, Ferrous	mg/L	<0.20	2.5	<0.20	<0.20
Iron, Total	ug/L	8310	9030	<100	380
Lead, Total	ug/L	<10.0	<10.0	<10.0	<10.0
Lithium, Total	ug/L	2640	<20.0	<20.0	<20.0
Magnesium, Total	ug/L	22000	34000	24400	27000
Manganese, Dissolved	ug/L	3930	1520	1700	21.1
Manganese, Total	ug/L	3910	1490	1700	33.4
Mercury	ug/L	NA	NA	NA	NA
Molybdenum, Dissolved	ug/L	437	488	<10.0	<10.0
Molybdenum, Total	ug/L	447	436	<10.0	<10.0
Nitrogen, Nitrate	mg/L	<0.10	<0.10	1.5	4.9
Nitrogen, Nitrite	mg/L	<0.10	<0.10	<0.10	<0.10
pH at 25 Degrees C	Std. Units	7.4	7.5	7.3	7.0
Phosphate as P04	mg/L	0.55	0.53	0.18	0.37
Potassium, Total	ug/L	257000	6150	<1000	<1000
Radium-226	pCi/L	0.55	0.262	<0.944	<0.846
Radium-228	pCi/L	1.95	1.52	<0.824	1.16
Selenium, Total	ug/L	<1.0	<1.0	1.5	6.9
Silica, Total	ug/L	12500	13300	11000	14300
Sodium, Total	ug/L	161000	33000	4580	11000
Sulfate	mg/L	1520	1050	29.5	73.2
Sulfide	mg/L	<0.10	<0.10	<0.10	<0.10
Thallium, Total	ug/L	<1.0	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L	2240	1530	402	631
Total Organic Carbon	mg/L	<1.0	<1.0	<1.0	<1.0
Total Radium	pCi/L	2.50	1.78	<1.77	1.16

Notes:
ft MSL: Elevation, feet mean sea level
°C: Degrees celcius
uS/cm: microsiemen per centimeter
umhos/cm: micromhos per centimeter
NA: Not analyzed
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 6
Summary of Monitoring Results - May 2021
RWS Type I Landfill
AES Indiana
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF01112

Well ID		MW-22	MW-23	MW-24
Sample Date		6/2/2021	6/2/2021	6/2/2021
Lab ID		50289042001	50289042002	50289042003
Static Water Elevation (ft MSL)		476.88	481.84	439.77
Field Parameters	Units			
Temperature	°C	19.31	19.47	16.92
Dissolved Oxygen, Field	mg/L	3.36	6.71	0.17
Conductivity, Field	uS/cm	3225.2	410.51	1954.8
ORP, Field	mV	-3.9	133.5	50.1
pH, Field	Std. Units	7.25	7.72	7.31
Analytical Data				
Alkalinity, Total as CaCO3	mg/L	342	152	182
Alkalinity,Bicarbonate (CaCO3)	mg/L	342	152	182
Alkalinity,Carbonate (CaCO3)	mg/L	<2.0	<2.0	<2.0
Aluminum, Total	ug/L	23800	2930	<200
Antimony, Total	ug/L	<1.0	<1.0	<1.0
Arsenic, Total	ug/L	14.2	2.6	<1.0
Barium, Total	ug/L	151	32.9	38.7
Beryllium, Total	ug/L	1.4	<0.20	<0.20
Boron, Total	ug/L	2430	135	818
Cadmium, Total	ug/L	3.9	<2.0	<2.0
Calcium, Total	ug/L	354000	58900	265000
Chloride	mg/L	193	8.6	79.2
Chromium, Total	ug/L	NA	NA	NA
Cobalt, Total	ug/L	10.0	1.8	2.0
Dissolved Organic Carbon	mg/L	4.2	<1.0	<1.0
Fluoride	mg/L	<0.10	0.12	<0.10
Iron, Ferrous	mg/L	<0.20	<0.20	<0.20
Iron, Total	ug/L	28400	3900	311
Lead, Total	ug/L	16.1	<10.0	<10.0
Lithium, Total	ug/L	4010	<20.0	1430
Magnesium, Total	ug/L	25800	17700	28800
Manganese, Dissolved	ug/L	2370	53.1	793
Manganese, Total	ug/L	2560	209	803
Mercury	ug/L	NA	<2.0	<2.0
Molybdenum, Dissolved	ug/L	252	<10.0	346
Molybdenum, Total	ug/L	250	<10.0	301
Nitrogen, Nitrate	mg/L	0.39	9.1	<0.10
Nitrogen, Nitrite	mg/L	<0.10	<0.5	<0.10
pH at 25 Degrees C	Std. Units	7.2	7.7	7.4
Phosphate as P04	mg/L	1.5	0.21	<0.15
Potassium, Total	ug/L	383000	1510	161000
Radium-226	pCi/L	0.446	0.315	0.729
Radium-228	pCi/L	3.01	0.755	0.903
Selenium, Total	ug/L	2.0	<1.0	<1.0
Silica, Total	ug/L	62500	23600	16600
Sodium, Total	ug/L	302000	2210	79000
Sulfate	mg/L	1620	16.3	833
Sulfide	mg/L	<0.10	<0.10	<0.10
Thallium, Total	ug/L	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L	3080	242	1520
Total Organic Carbon	mg/L	3.6	<1.0	<1.0
Total Radium	pCi/L	3.46	1.07	1.63

Notes:
ft MSL: Elevation, feet mean sea level
°C: Degrees celcius
uS/cm: microsiemen per centimeter
umhos/cm: micromhos per centimeter
NA: Not analyzed
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 7
 Summary of Monitoring Results - September 2021
 RWS Type I Landfill
 AES Indiana
 Petersburg Generating Station
 Petersburg, Indiana
 ATC Project No. 170LF01112

Well ID		MW-20A	MW-20B	MW-20I
Sample Date		9/16/2021	9/16/2021	9/16/2021
Lab ID		50297657001	50297657002	50297657003
Static Water Elevation (ft MSL)		406.29	401.12	405.55
Field Parameters	Units			
Temperature	°C	16.93	14.85	14.34
Dissolved Oxygen, Field	mg/L	0.05	0.15	52.1
Conductivity, Field	uS/cm	1642.00	1056.0	453.16
ORP, Field	mV	-156.2	82.7	52.1
pH, Field	Std. Units	7.35	6.83	7.16
Analytical Data				
Alkalinity, Total as CaCO3	mg/L	168	446	375
Alkalinity,Bicarbonate (CaCO3)	mg/L	168	446	375
Alkalinity,Carbonate (CaCO3)	mg/L	<2.0	<2.0	<2.0
Aluminum	ug/L	865	1680	207
Antimony	ug/L	<1.0	<1.0	<1.0
Arsenic	ug/L	2.7	1.1	<1.0
Barium	ug/L	45.1	119	51.4
Beryllium	ug/L	<0.20	<0.20	<0.20
Boron	ug/L	18300	1230	470
Boron, Dissolved	ug/L	18100	1190	443
Cadmium	ug/L	<2.0	<2.0	<2.0
Calcium	ug/L	492000	213000	133000
Chloride	mg/L	82.0	35.4	11.7
Cobalt	ug/L	2.0	2.0	2.2
Dissolved Organic Carbon	mg/L	1.6	1.6	<1.0
Fluoride	mg/L	<0.10	<0.10	0.13
Iron	ug/L	9940	2060	488
Lead	ug/L	<10.0	<10.0	<10.0
Lithium	ug/L	<20.0	<20.0	<20.0
Lithium, Dissolved	ug/L	<20.0	<20.0	<20.0
Magnesium	ug/L	28400	33100	27600
Manganese	ug/L	1540	301	2390
Manganese, Dissolved	ug/L	1460	36.1	2230
Molybdenum	ug/L	656	<10.0	<10.0
Molybdenum, Dissolved	ug/L	662	<10.0	<10.0
Nitrogen, Nitrate	mg/L	<0.10	1.5	1.8
Nitrogen, Nitrite	mg/L	<0.10	<0.10	<0.10
pH at 25 Degrees C	Std. Units	7.2	7.0	7.2
Phosphate as P04	mg/L	0.34	<0.15	<0.15
Potassium	ug/L	7380	1200	<1000
Radium-226	pCi/L	<0.883	<0.995	0.561
Radium-228	pCi/L	1.22	<0.790	0.628
Selenium	ug/L	1.4	1.1	1.4
Silica	ug/L	16400	19700	12500
Sodium	ug/L	34800	21600	7330
Sulfate	mg/L	1080	180	51.5
Sulfide	mg/L	<0.10	<0.10	<0.10
Thallium	ug/L	<1.0	<1.0	<1.0
Total Dissolved Solids	mg/L	2020	788	482
				NA - container
Total Organic Carbon	mg/L	1.4	1.3	broke at lab
Total Radium	pCi/L	<1.28	<1.79	1.19

Notes:
 ft MSL: Elevation, feet mean sea level
 °C: Degrees celcius
 uS/cm: microsiemen per centimeter
 umhos/cm: micromhos per centimeter
 NA: Not Analyzed
 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 8
Groundwater Protection Standards - November 2020 and May 2021
RWS Type I Landfill
AES Indiana
Petersburg Generating Station
Petersburg, Indiana
ATC Project No. 170LF01112

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	10	2000	4	5	100	6	4	15	40	2	100	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