HALEY ALDRICH

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REPORT ON

2017 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT F.B. CULLEY GENERATING STATION WARRICK COUNTY, INDIANA

by Haley & Aldrich, Inc.
Greenville, South Carolina

for Southern Indiana Gas and Electric Company (SIGECO)
Evansville, Indiana

File No. 129420-003
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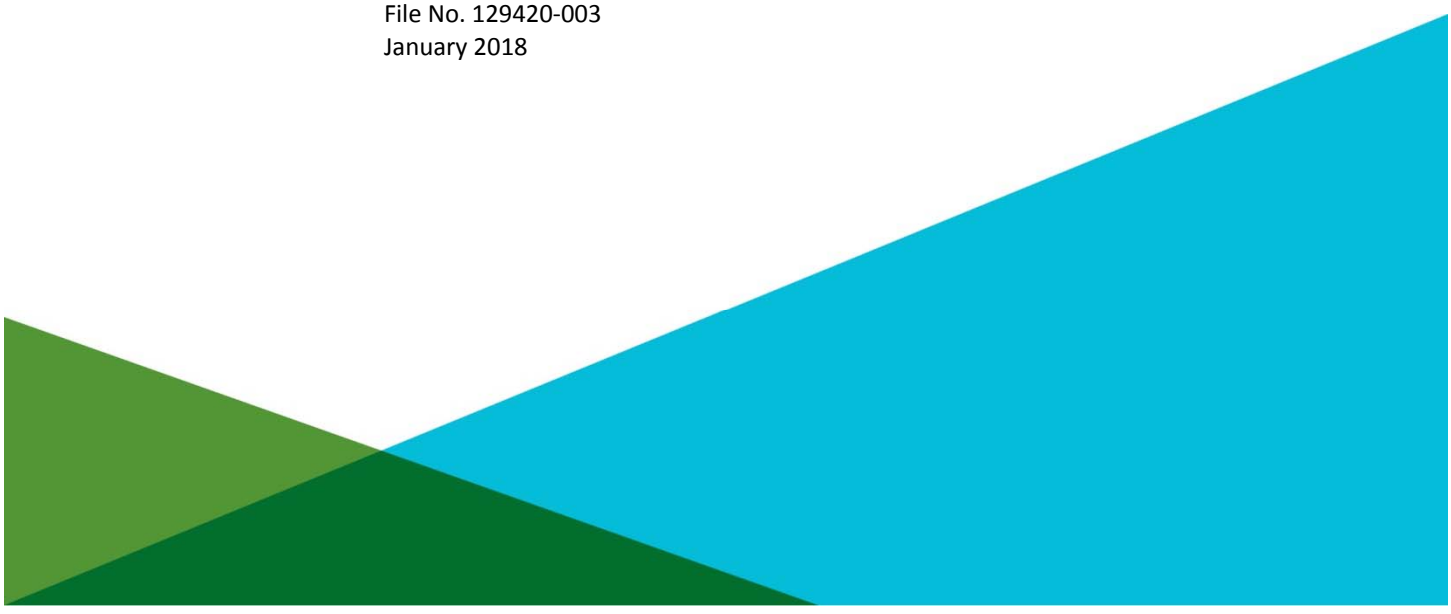

Annual Groundwater Monitoring Report Summary

Haley & Aldrich, Inc. (Haley & Aldrich) has prepared this 2017 Annual Groundwater Monitoring Corrective Action Report for the F.B. Culley Generating Station (FBC). This 2017 Annual Report was developed to comply with the United States Environmental Protection Agency (USEPA) Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals (CCR) from Electric Utilities, 40 CFR Part 257, Subpart D dated 17 April 2015 (Rule), specifically subsection §257.90(e)(1) through (5). Southern Indiana Gas and Electric Company operates the existing coal combustion residuals (CCR) management unit referred to as the East Ash pond at FBC located in Warrick County, Indiana. This CCR unit is subject to the CCR Rule since it was active as of the effective date of the CCR Rule.

This annual report addresses the single CCR management unit at FBC, as described in the Groundwater Monitoring Program report, which was certified and placed in the facility's operating record on October 17, 2017 as required by §257.105(h)(2) and posted on the facility's website on November 16, 2017 as required by §257.107(h)(2).

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

§257.90 APPLICABILITY

§257.90(e) Annual groundwater monitoring and corrective action report. 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).

As required, this annual report documents the status of the groundwater monitoring program for the CCR management unit at FBC and summarizes key actions completed during the prior calendar year.

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

§257.90(e)(1) AERIAL IMAGE OF GROUNDWATER MONITORING PROGRAM

§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;

As required by §257.90(e)(1), maps showing the location of the East Ash pond and associated upgradient and downgradient monitoring wells are included in this report as **Figure 1**. In addition, this information is presented in the Groundwater Monitoring Program report prepared for FBC, which was placed in the facility's operating record on October 17, 2017 as required by §257.105(h)(2).

§257.90(e)(2) ADJUSTMENTS TO GROUNDWATER MONITORING PROGRAM

§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;

To comply with the requirements of §257.91, a groundwater monitoring network of 9 wells was installed for the East Ash pond at FBC. Details of the design, and construction of the monitoring wells are summarized in **Table 1.** Construction of the groundwater monitoring network was accomplished in three phases. The first phase of drilling, which included CCR-AP-1 through CCR-AP-5, was completed in December 2015. This initial round of well installation was conducted to evaluate the hydrostratigraphy and groundwater flow characteristics downgradient and upgradient of the East Ash pond. To supplement the groundwater monitoring array, two additional rounds of drilling and well installation were completed in March 2016 and February 2017. In March 2016 CCR-AP-1 was deepened and replaced with CCR-AP-1R to provide a sufficient amount of groundwater for sampling. Also in March 2016, monitoring well CCR-AP-6 was installed to supplement the monitoring array downgradient and CCR-AP-7 was installed to provide an additional upgradient monitoring point. In February 2017, CCR-AP-8 was installed downgradient of the East Ash pond to establish a network of six downgradient wells and CCR-AP-9 was installed upgradient of the East Ash pond resulting in network of three upgradient wells. Additional description of the monitoring network is presented in the Groundwater Monitoring Program report which was placed in the facility's operating record on October 17, 2017, as required by §257.105(h)(2). None of the wells installed to monitor groundwater quality upgradient and downgradient of the East Ash pond were decommissioned in 2017.

§257.90(e)(3) SUMMARY OF GROUNDWATER ANALYSIS

§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 [upgradient] ***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 upgradient and downgradient monitoring well were collected prior to October 17, 2017. A summary of the

groundwater monitoring program for the East Ash pond, including the analytical results for the Appendix III and Appendix IV list of constituents, is presented in **Table 2** of this report. All the samples obtained were required by the detection monitoring program.

§257.90(e)(4) CURRENT GROUNDWATER MONITORING PROGRAM

§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 groundwater related activities conducted during the prior calendar year at the East Ash pond. The statistical analysis of the initial minimum eight rounds of groundwater sampling was completed by January 15, 2018 as required. This statistical analysis relied on the use of tolerance intervals as originally certified on October 17, 2017. The results of this statistical analysis identified statistically significant increases (SSI) of Appendix III constituents in one or more wells monitoring the uppermost aquifer downgradient of the East Ash pond. Consistent with §257.94(e)(2), SIGECO is evaluating options to demonstrate that a source other than the CCR unit caused the SSI and will provide 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), as appropriate, in subsequent annual reports.

§257.90(e)(5) OTHER REQUIRED INFORMATION

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

This initial Annual Report documents activities conducted to comply with Sections §257.90 through §257.94 of the Rule. There are no applicable requirements from Sections §257.95 through §257.98.

Attachments
Table 1. Groundwater Monitoring Well Location and Construction Details
Table 2. Summary of Analytical Results
Figure 1. Monitoring Well Network

TABLES

TABLE 1

GROUNDWATER MONITORING WELL LOCATION AND CONSTRUCTION DETAILS
F.B. CULLEY GENERATING STATION - EAST ASH POND
NEWBURGH, INDIANA

Well	CCR Unit	Date Installed	Easting	Northing	Top of Pad Elevation (ft msl)	Top of Riser Elevation (ft msl)	Surface Grout (ft bgs)	Bentonite (ft bgs)	Sand Pack (ft bgs)	Screen Zone (ft bgs)	Screen Length (ft)	Well Radius (in)
CCR-AP-1R	East Ash Pond	March 2016	2883429.69	969939.69	438.50	441.64	1.0-51.0	51.0-53.0	53.0-65.0	55.0-65.0	10	2
CCR-AP-2	East Ash Pond	December 2015	2884168.67	969117.52	394.40	393.97	1.0-30.5	30.5-32.5	32.5-45.0	36.0-46.0	10	2
CCR-AP-3	East Ash Pond	December 2015	2883542.09	969007.98	395.10	394.54	1.0-31.0	31.0-32.8	32.8-45.0	35.0-45.0	10	2
CCR-AP-4	East Ash Pond	December 2015	2883281.93	969641.70	395.40	394.91	1.0-19.7	19.7-22.5	23.0-35.5	25.5-35.5	10	2
CCR-AP-5	East Ash Pond	December 2015	2884016.66	969379.68	394.80	394.32	1.0-28.6	28.6-30.6	30.6-44.0	34.0-44.0	10	2
CCR-AP-6	East Ash Pond	March 2016	2883285.03	969122.16	397.00	396.71	1.0-31.5	31.5-33.0	33.5-45.5	35.5-45.5	10	2
CCR-AP-7	East Ash Pond	March 2016	2883090.34	970774.64	429.50	434.11	1.0-16.0	16.0-18.0	18.0-30.0	20.0-30.0	10	2
CCR-AP-8	East Ash Pond	February 2017	2883846.87	969046.03	394.15	393.83	1.0-31.5	31.5-33.0	33.5-45.5	35.5-45.5	10	2
CCR-AP-9	East Ash Pond	February 2017	2883998.96	969768.61	445.58	448.69	1.0-56.0	56.0-58.0	58.0-70.0	60.0-70.0	10	2

NOTES:

bgs = below ground surface
ft = feet
in = inches
msl = mean sea level
Datum of Elevations in NAVD 88

TABLE II
SUMMARY OF ANALYTICAL RESULTS
F.B. CULLEY GENERATING STATION
NEWBURGH, INDIANA

Location Group	Downgradient								
Location Name	CCR-AP-2	CCR-AP-2	CCR-AP-2	CCR-AP-2	CCR-AP-2	CCR-AP-2	CCR-AP-2	CCR-AP-2	CCR-AP-2
Sample Name	CCR-AP-2-20160610	CCR-AP-2-20160812	CCR-AP-2-20161028	CCR-AP-2-20161207	CCR-AP-2-20170208	CCR-AP-2-20170406	CCR-AP-2-20170607	CCR-AP-2-20170928	CCR-AP-2-20171117
Sample Date	06/10/2016	08/12/2016	10/28/2016	12/07/2016	02/08/2017	04/06/2017	06/07/2017	09/28/2017	11/17/2017
Lab Sample ID	180-55667-2	180-57631-2	180-60350-2	180-61530-2	180-63329-2	180-65041-4	180-67233-2	180-70838-6	180-72640-2
Water Level (ft amsl)	360.81	360.09	359.74	360.29	361.42	365.93	360.28	359.91	360.97
Monitoring Program	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Detection
Field Parameters									
Temperature (Deg C)	23.78	**22.2**	**17.36**	**16.08**	**11.12**	**14**	**21.33**	**20.28**	**13.92**
Turbidity, Field (FNU)	-	-	-	-	-	-	-	-	-
Dissolved Oxygen, Field (mg/L)	2.34	**4.46**	**4.49**	**6.85**	**8.25**	**3.69**	**2.93**	**1.53**	**4.21**
Conductivity, Field (mS/cm)	2.05436	**2.149**	**2.05359**	**1.6746**	**0.78602**	**2.65509**	**1.99948**	**2.18197**	**2.18306**
ORP, Field (mv)	42.71	**40**	**-67.04**	**-73.8**	**17.3**	**10.57**	**59.36**	**141.67**	**143.3**
Turbidity, Field (NTU)	3729.19	**1083**	**375.23**	**6180**	**2286**	**2940**	**2131**	**3019**	**2084**
pH, Field (su)	6.56	**7.61**	**7.71**	**6.63**	**8.14**	**7.41**	**7.85**	**6.51**	**7.61**
Detection Monitoring - EPA Appendix III Constituents (mg/L)									
Boron, Total	15	**12**	**11**	**12**	**12**	**12**	**12**	**7.8**	**14**
Calcium, Total	200	**230**	**220 J-**	**240**	**260 J-**	**240 J+**	**240**	**220**	**260**
Chloride (mg/L)	72	**73**	**73 J+**	**75**	**83**	**89**	**81**	**110**	**120**
Fluoride (mg/L)	0.16 J+	**0.28**	**0.23**	**0.3 J+**	**0.26 J+**	**0.29**	**0.3 J**	**0.28**	**0.11**
Sulfate (mg/L)	530 J-	**730**	**540 J+**	**680**	**570**	**600**	**510**	**610**	**680 J-**
pH (lab) (su)	7.26 J	**7.4 J**	**6.7 J**	**6.8 J**	**7 J**	**6.8 J**	**6.8 J**	**6.9 J**	**7 J**
Total Dissolved Solids (TDS) (mg/L)	1700	**1700**	**1600**	**1600**	**1500**	**1600**	**1600**	**1700**	**1600**
Assessment Monitoring - EPA Appendix IV Constituents (mg/L)									
Antimony, Total	0.002	0.002 U	0.002 U	**0.00024 J**	0.002 U	0.002 U	0.002 U	**0.0017 J**	0.01 U
Arsenic, Total	0.0018	**0.0016**	**0.0044**	**0.003**	**0.0035**	**0.0018**	**0.0066**	**0.017**	**0.0066**
Barium, Total	0.055	**0.038**	**0.09**	**0.14**	**0.12**	**0.052**	**0.27**	**0.44**	**0.17**
Beryllium, Total	0.00014 J	**0.00015 J**	**0.00066 J**	**0.00056 J**	**0.00038 J**	**0.00032 J**	**0.00099 J**	**0.0027**	**0.0012 J**
Cadmium, Total	0.00055 J	**0.00023 J**	**0.00053 J**	**0.00048 J**	**0.00038 J**	**0.00011 J**	**0.00078 J**	**0.00073 J**	0.005 U
Chromium, Total	0.0035	**0.003**	**0.013**	**0.011**	**0.0084**	**0.0037**	**0.025**	**0.056**	**0.021**
Cobalt, Total	0.0073	**0.0096**	**0.016 J**	**0.012**	**0.014**	**0.011**	**0.021**	**0.038**	**0.018**
Lead, Total	0.0023	**0.0028**	**0.0096 J**	**0.006**	**0.0057**	**0.0026 J+**	**0.016**	**0.051**	**0.012**
Lithium, Total	0.05 U	0.05 U	**0.017 J**	0.05 U	**0.01 J**	0.05 U	**0.023 J**	**0.023 J**	0.25 U
Molybdenum, Total	0.0018 J	**0.00099 J**	**0.0014 J**	**0.0015 J**	**0.0017 J**	**0.00094 J**	**0.0024 J**	**0.0051**	**0.004 J**
Selenium, Total	0.00044 J	**0.00076 J**	**0.0013 J**	0.005 U	0.005 U	0.005 UJ	0.005 U	**0.0044 J**	0.025 U
Thallium, Total	0.000048 J	**0.000048 J**	**0.00014 J**	**0.00016 J**	**0.00017 J**	0.001 U	**0.00026 J**	**0.00068 J**	**0.00079 J**
Mercury, Total	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Radiological (pCi/L)									
Radium-226	0.222 J ± 0.145	**1.22 ± 0.355**	**0.731 ± 0.526**	**2.01 ± 1.16**	**0.672 ± 0.334**	**1.03 ± 0.385**	**0.894 ± 0.361**	**0.730 ± 0.327**	**0.266 ± 0.151**
Radium-226 & 228	0.764 U ± 0.590	**2.32 ± 1.08**	**1.38 J ± 0.750**	**2.72 J ± 1.61**	**1.68 ± 0.684**	**2.47 J ± 1.01**	**3.29 ± 1.13**	**1.91 J+ ± 1.11**	**0.850 J+ ± 0.522**
Radium-228	0.542 U ± 0.572	1.09 U ± 1.02	0.648 U ± 0.534	0.707 U ± 1.12	**1.00 ± 0.596**	**1.44 ± 0.934**	**2.40 ± 1.07**	1.18 U ± 1.06	0.585 U ± 0.500

ABBREVIATIONS AND NOTES:
CCR: Coal Combustion Residuals
CFR: Code of Federal Regulations
ft amsl: feet above mean sea level
MCL: Maximum Contaminant Level
mg/L: milligram per liter
mS/cm: milliSiemen per centimeter
mv: millivolt
NA: Not Applicable
NTU: Nephelometric Turbidity Units
pCi/L: picoCurie per liter
su: standard units
USEPA: United States Environmental Protection Agency

QUALIFIERS:
J: value is estimated
J+: value is estimated with a potentially high bias
J-: value is estimated with a potentially low bias
R: value is rejected
U: Not detected value is the laboratory reporting limit

- USEPA. 2016. Final Rule: Disposal of Coal Combustion Residuals from Electric Utilities. July 26. 40 CFR Part 257.
https://www.epa.gov/coalash/coal-ash-rule

TABLE II
SUMMARY OF ANALYTICAL RESULTS
F.B. CULLEY GENERATING STATION
NEWBURGH, INDIANA

Location Group	Downgradient								
Location Name	CCR-AP-3	CCR-AP-3	CCR-AP-3	CCR-AP-3	CCR-AP-3	CCR-AP-3	CCR-AP-3	CCR-AP-3	CCR-AP-3
Sample Name	CCR-AP-3-20160610	CCR-AP-3-20160815	CCR-AP-3-20161028	CCR-AP-3-20161207	CCR-AP-3-20170208	CCR-AP-3-20170406	CCR-AP-3-20170607	CCR-AP-3-20170928	CCR-AP-3-20171117
Sample Date	06/10/2016	08/15/2016	10/28/2016	12/07/2016	02/08/2017	04/06/2017	06/07/2017	09/28/2017	11/17/2017
Lab Sample ID	180-55667-3	180-57631-3	180-60350-3	180-61530-3	180-63329-3	180-65041-5	180-67233-3	180-70838-7	180-72640-3
Water Level (ft amsl)	363.31	362.21	361.83	361.92	364.22	364.05	363.8	362.09	362.36
Monitoring Program	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Detection
Field Parameters									
Temperature (Deg C)	**25.51**	**21.8**	**18.91**	**14.9**	**11.52**	**14.85**	**19.1**	**19.39**	**12.84**
Turbidity, Field (FNU)	-	-	-	-	-	-	-	-	-
Dissolved Oxygen, Field (mg/L)	**0.49**	**4.41**	**4.52**	**4.05**	**8.44**	**6.11**	**2.71**	**2.1**	**4.04**
Conductivity, Field (mS/cm)	**1.79964**	**1.827**	**1.81571**	**1.5418**	**1.84566**	**1.91137**	**1.71067**	**1.78845**	**1.79086**
ORP, Field (mv)	**-152.01**	**-92**	**-162.25**	**-200.5**	**-109.73**	**-34.59**	**-124.19**	**-133.73**	**-123.58**
Turbidity, Field (NTU)	**37.7**	**111.2**	**175.6**	**706.49**	**202.52**	**110.58**	**169.96**	**55.84**	**245.28**
pH, Field (su)	**6.83**	**6.8**	**7.68**	**7.12**	**7.63**	**7.39**	**6.96**	**6.99**	**7.08**
Detection Monitoring - EPA Appendix III Constituents (mg/L)									
Boron, Total	**0.18**	**0.15 J+**	**0.16**	**0.17 J+**	**0.18 J+**	**0.2**	0.27 U	**0.12**	0.19 U
Calcium, Total	**160**	**170**	**190 J-**	**190**	**190 J-**	**180 J+**	**200**	**180**	**190**
Chloride (mg/L)	**26**	**26**	**27 J+**	**26**	**23**	**25**	**25**	**25**	**25**
Fluoride (mg/L)	0.1 U	**0.93**	**0.31**	**0.5**	**0.39**	**0.57**	**0.55**	**0.45**	**0.14**
Sulfate (mg/L)	**1.3 J-**	R	**1.1 J+**	1 U	**0.67 J**	1 U	**0.56 J**	**0.48 J**	**0.82 J-**
pH (lab) (su)	**7.17 J**	**7.6 J**	**7 J**	**7.2 J**	**7.2 J**	**7.1 J**	**7.2 J**	**7.1 J**	**7.4 J**
Total Dissolved Solids (TDS) (mg/L)	**1000**	**1000**	**1000**	**970**	**1000**	**1000**	**1200**	**1000**	**970**
Assessment Monitoring - EPA Appendix IV Constituents (mg/L)									
Antimony, Total	0.002 U	0.002 U	0.002 U	**0.00031 J**	0.002 U	0.002 U	0.002 U	**0.00058 J**	0.002 U
Arsenic, Total	**0.058**	**0.072**	**0.071**	**0.068**	**0.086**	**0.08**	**0.077**	**0.066**	**0.067**
Barium, Total	**0.41**	**0.38**	**0.4**	**0.43**	**0.46**	**0.42**	**0.44**	**0.39**	**0.4**
Beryllium, Total	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Cadmium, Total	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Chromium, Total	**0.0021**	**0.0018 J**	**0.002**	**0.0023**	**0.002**	**0.0021**	0.002 U	0.002 U	**0.0021**
Cobalt, Total	**0.0094**	**0.008**	**0.0076 J**	**0.007**	**0.0072**	**0.0063**	**0.0062**	**0.0057**	**0.0056**
Lead, Total	**0.00041 J**	**0.00039 J**	0.001 UJ	**0.00066 J**	**0.00035 J**	**0.00048 J+**	0.001 U	**0.00098 J**	**0.00051 J**
Lithium, Total	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Molybdenum, Total	**0.011**	**0.014**	**0.014**	**0.014**	**0.013**	**0.011**	**0.012**	**0.01**	**0.011**
Selenium, Total	**0.0015 J**	**0.00062 J**	**0.0018 J**	**0.0019 J**	**0.002 J**	**0.0018 J-**	**0.0018 J**	**0.0016 J**	**0.0017 J**
Thallium, Total	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.0001 J**
Mercury, Total	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Radiological (pCi/L)									
Radium-226	**0.657 J ± 0.201**	**0.865 ± 0.232**	**1.15 ± 0.477**	**0.789 ± 0.398**	0.373 U ± 0.293	**0.450 ± 0.144**	**0.582 ± 0.158**	**0.411 ± 0.136**	**0.626 ± 0.162**
Radium-226 & 228	**1.75 ± 0.615**	**1.65 ± 0.627**	**1.97 ± 0.589**	**1.72 ± 0.623**	0.862 U ± 0.680	**1.09 ± 0.373**	**1.83 ± 0.456**	R	R
Radium-228	**1.10 ± 0.581**	0.784 U ± 0.583	**0.819 ± 0.347**	**0.932 ± 0.480**	0.489 U ± 0.614	**0.644 ± 0.344**	**1.25 ± 0.427**	R	R

ABBREVIATIONS AND NOTES:
CCR: Coal Combustion Residuals
CFR: Code of Federal Regulations
ft amsl: feet above mean sea level
MCL: Maximum Contaminant Level
mg/L: milligram per liter
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NTU: Nephelometric Turbidity Units
pCi/L: picoCurie per liter
su: standard units
USEPA: United States Environmental Protection Agency

QUALIFIERS:
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- USEPA. 2016. Final Rule: Disposal of Coal Combustion Residuals from Electric Utilities. July 26. 40 CFR Part 257. https://www.epa.gov/coalash/coal-ash-rule

TABLE II
SUMMARY OF ANALYTICAL RESULTS
F.B. CULLEY GENERATING STATION
NEWBURGH, INDIANA

Location Group	Downgradient								
Location Name	CCR-AP-4	CCR-AP-4	CCR-AP-4	CCR-AP-4	CCR-AP-4	CCR-AP-4	CCR-AP-4	CCR-AP-4	CCR-AP-4
Sample Name	CCR-AP-4-20160610	CCR-AP-4-20160812	CCR-AP-4-20161028	CCR-AP-4-20161207	CCR-AP-4-20170208	CCR-AP-4-20170406	CCR-AP-4-20170608	CCR-AP-4-20170929	CCR-AP-4-20171117
Sample Date	06/10/2016	08/12/2016	10/28/2016	12/07/2016	02/08/2017	04/06/2017	06/08/2017	09/29/2017	11/17/2017
Lab Sample ID	180-55667-4	180-57631-4	180-60350-4	180-61530-4	180-63329-4	180-65041-6	180-67233-4	180-70838-8	180-72640-4
Water Level (ft amsl)	386.99	386.89	384.57	383.48	385.12	385.24	384.93	385.35	385.57
Monitoring Program	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Detection
Field Parameters									
Temperature (Deg C)	**25.41**	**23.12**	**15.92**	**16.59**	**15.16**	**13.92**	**21.09**	**21.03**	**13.29**
Turbidity, Field (FNU)	-	-	-	-	-	-	-	-	-
Dissolved Oxygen, Field (mg/L)	**1.34**	**2.37**	**3.75**	**4.8**	**0.21**	**2.63**	**3.95**	**2.65**	**1.02**
Conductivity, Field (mS/cm)	**1.83585**	**1.971**	**1.86696**	**1.3787**	**1.8253**	**1.50947**	**1.75801**	**1.90655**	**1.89809**
ORP, Field (mv)	**-106.23**	**-129**	**-108.94**	**-115.5**	**-130.18**	**-16.37**	**-101.4**	**-166.25**	**-113.5**
Turbidity, Field (NTU)	**999.34**	**266.5**	**294.14**	**1.7824**	**242.85**	**1091**	**655.07**	**1016**	**419.08**
pH, Field (su)	**6.64**	**7.56**	**6.98**	**6.58**	**6.58**	**7.1**	**7.32**	**6.98**	**6.58**
Detection Monitoring - EPA Appendix III Constituents (mg/L)									
Boron, Total	**0.16**	**0.16 J+**	**0.18**	**0.16 J+**	0.14 U	**0.17**	0.18 U	**0.085**	0.14 U
Calcium, Total	**160**	**190**	**170 J-**	**160**	**180 J-**	**180 J+**	**190**	**170**	**180**
Chloride (mg/L)	**25**	**24**	**85 J+**	**70**	**49**	**48**	**46**	**41**	**40**
Fluoride (mg/L)	**0.29 J+**	**0.43**	**0.3**	**0.49**	**0.32 J+**	**0.36**	**0.46**	**0.35**	**0.35**
Sulfate (mg/L)	**20 J-**	R	**15 J+**	**3.9 J+**	1 U	1 U	**0.64 J**	**0.63 J**	**1.1 J-**
pH (lab) (su)	**6.95 J**	**7.3 J**	**6.7 J**	**7 J**	**6.9 J**	**6.7 J**	**6.7 J**	**6.8 J**	**7.1 J**
Total Dissolved Solids (TDS) (mg/L)	**1000**	**1000**	**890**	**880**	**900**	**960**	**1000**	**980**	**910**
Assessment Monitoring - EPA Appendix IV Constituents (mg/L)									
Antimony, Total	0.002 U	0.002 U	0.002 U	**0.0004 J**	0.002 U	0.002 U	0.002 U	**0.00066 J**	0.002 U
Arsenic, Total	**0.036**	**0.065**	**0.05**	**0.045**	**0.086**	**0.086**	**0.086**	**0.081**	**0.083**
Barium, Total	**0.52**	**0.75**	**0.63**	**0.61**	**0.64**	**0.63**	**0.66**	**0.58**	**0.57**
Beryllium, Total	**0.00049 J**	**0.00033 J**	**0.00025 J**	**0.00046 J**	**0.00014 J**	**0.00015 J**	**0.00026 J**	**0.00017 J**	**0.00028 J**
Cadmium, Total	**0.00018 J**	**0.00018 J**	0.001 U	**0.00023 J**	0.001 U	0.001 U	**0.00014 J**	**0.00016 J**	0.001 U
Chromium, Total	**0.012**	**0.0081**	**0.0037**	**0.014**	**0.0026**	**0.0028**	**0.0066**	**0.0076**	**0.01**
Cobalt, Total	**0.0078**	**0.0071**	**0.0045 J**	**0.0086**	**0.0039**	**0.0045**	**0.0068**	**0.0055**	**0.0064**
Lead, Total	**0.0099**	**0.0063**	**0.0057 J**	**0.011**	**0.0018**	**0.0018 J+**	**0.0045**	**0.0048**	**0.0046**
Lithium, Total	**0.01 J**	**0.0096 J**	**0.014 J**	**0.0098 J**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Molybdenum, Total	**0.0022 J**	**0.0025 J**	**0.0011 J**	**0.002 J**	**0.00093 J**	**0.00092 J**	**0.0014 J**	**0.0016 J**	**0.0022 J**
Selenium, Total	**0.0018 J**	**0.0016 J**	**0.0011 J**	**0.00098 J**	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U
Thallium, Total	**0.000084 J**	**0.000061 J**	**0.00011 J**	**0.00015 J**	**0.000063 J**	0.001 U	**0.000061 J**	0.001 U	**0.00012 J**
Mercury, Total	0.0002 U	0.0002 U	0.0004 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Radiological (pCi/L)									
Radium-226	**1.07 J ± 0.261**	**1.53 ± 0.429**	**1.54 ± 0.683**	**2.11 ± 1.11**	**0.984 ± 0.383**	**0.789 ± 0.227**	**1.60 ± 0.408**	**1.26 ± 0.397**	**1.15 ± 0.266**
Radium-226 & 228	**1.49 ± 0.769**	**2.90 ± 1.49**	**2.40 ± 0.816**	**4.28 ± 1.74**	**2.01 ± 0.728**	**1.16 J ± 0.538**	**3.60 ± 0.914**	R	R
Radium-228	0.417 U ± 0.723	1.37 U ± 1.43	**0.864 ± 0.448**	**2.17 ± 1.34**	**1.03 ± 0.620**	0.370 U ± 0.488	**2.00 ± 0.818**	R	R

ABBREVIATIONS AND NOTES:
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CFR: Code of Federal Regulations
ft amsl: feet above mean sea level
MCL: Maximum Contaminant Level
mg/L: milligram per liter
mS/cm: milliSiemen per centimeter
mv: millivolt
NA: Not Applicable
NTU: Nephelometric Turbidity Units
pCi/L: picoCurie per liter
su: standard units
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QUALIFIERS:
J: value is estimated
J+: value is estimated with a potentially high bias
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- USEPA. 2016. Final Rule: Disposal of Coal Combustion Residuals from Electric Utilities. July 26. 40 CFR Part 257. https://www.epa.gov/coalash/coal-ash-rule

TABLE II
SUMMARY OF ANALYTICAL RESULTS
F.B. CULLEY GENERATING STATION
NEWBURGH, INDIANA

Location Group	Downgradient								
Location Name	CCR-AP-5	CCR-AP-5	CCR-AP-5	CCR-AP-5	CCR-AP-5	CCR-AP-5	CCR-AP-5	CCR-AP-5	CCR-AP-5
Sample Name	CCR-AP-5-20160610	CCR-AP-5-20160812	CCR-AP-5-20161028	CCR-AP-5-20161207	CCR-AP-5-20170208	CCR-AP-5-20170407	CCR-AP-5-20170608	CCR-AP-5-20170928	CCR-AP-5-20171117
Sample Date	06/10/2016	08/12/2016	10/28/2016	12/07/2016	02/08/2017	04/07/2017	06/08/2017	09/28/2017	11/17/2017
Lab Sample ID	180-55667-5	180-57631-5	180-60350-5	180-61530-5	180-63329-5	180-65041-7	180-67233-5	180-70838-1	180-72640-5
Water Level (ft amsl)	383.83	382.15	377.81	378.14	383.3	383.12	382.28	380.86	382.01
Monitoring Program	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Detection
Field Parameters									
Temperature (Deg C)	**19.48**	**19.13**	**18.43**	**15.84**	**16.05**	**17.66**	**18.75**	**18.88**	**17**
Turbidity, Field (FNU)	-	-	-	-	-	-	-	**11.86**	-
Dissolved Oxygen, Field (mg/L)	**0.04**	**0.08**	**-0.02**	**0.25**	**0.07**	**0.05**	**0.08**	**0.08**	**0.09**
Conductivity, Field (mS/cm)	**4.89844**	**4.82**	**5.02113**	**3.9142**	**4.86306**	**4.22473**	**3.95584**	**4.19408**	**4.48884**
ORP, Field (mv)	**-82.1**	**-133**	**-247.07**	**-181.1**	**67.41**	**59.85**	**43.86**	**42.55**	**69.25**
Turbidity, Field (NTU)	**11.79**	**4.632**	**-3.91**	**2.44**	**0.62**	**-16.87**	**-1.13**	-	**1.94**
pH, Field (su)	**7**	**6.92**	**7.03**	**6.85**	**6.83**	**6.93**	**6.86**	**6.75**	**6.7**
Detection Monitoring - EPA Appendix III Constituents (mg/L)									
Boron, Total	**53**	**54**	**68**	**64**	**59**	**56**	**58**	**33**	**52**
Calcium, Total	**520**	**480**	**550 J-**	**570**	**580 J-**	**550 J+**	**510**	**470**	**510**
Chloride (mg/L)	**880**	**750**	**860 J+**	**860**	**780**	**880**	**560**	**640**	**770**
Fluoride (mg/L)	**0.58**	**0.99**	**1.1**	**1.3**	**0.98**	**0.96**	**1.1**	**0.76 J**	**1**
Sulfate (mg/L)	2.5 UJ	**1500**	**1600 J+**	**1700**	**1500**	**1900**	**1400**	**1400**	**1600 J-**
pH (lab) (su)	**7.09 J**	**7.4 J**	**7 J**	**7 J**	**7.2 J**	**7 J**	**7.1 J**	**7 J**	**7 J**
Total Dissolved Solids (TDS) (mg/L)	**4600**	**4400**	**4000**	**4200**	**4000**	**4200**	**4200**	**3300**	**3500**
Assessment Monitoring - EPA Appendix IV Constituents (mg/L)									
Antimony, Total	0.02 U	0.002 U	0.002 U	**0.000058 J**	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Arsenic, Total	0.01 U	**0.00059 J**	**0.00065 J**	**0.00073 J**	**0.0015**	**0.00039 J**	**0.00042 J**	**0.00084 J**	**0.00039 J**
Barium, Total	**0.032 J**	**0.03**	**0.034**	**0.036**	**0.046**	**0.034**	**0.036**	**0.041**	**0.038**
Beryllium, Total	0.01 U	0.001 U	0.001 U	**0.00096 J**	**0.00019 J**	**0.00058 J**	**0.00017 J**	**0.00047 J**	0.001 U
Cadmium, Total	0.01 U	**0.00016 J**	**0.00015 J**	0.001 U	**0.0012**	**0.0004 J**	**0.00037 J**	**0.00075 J**	**0.00035 J**
Chromium, Total	0.02 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
Cobalt, Total	**0.0069**	**0.0063**	**0.0065 J**	**0.0061**	**0.007**	**0.0063**	**0.0053**	**0.0041**	**0.0046**
Lead, Total	0.01 U	0.001 U	0.001 UJ	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U
Lithium, Total	**0.14**	**0.13**	**0.15**	**0.13**	**0.15**	**0.15**	**0.11**	**0.099**	**0.12**
Molybdenum, Total	**0.38**	**0.37**	**0.41**	**0.39**	**0.39**	**0.33**	**0.3**	**0.21**	**0.24**
Selenium, Total	0.05 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U
Thallium, Total	0.01 U	0.001 U	0.001 U	0.001 U	**0.000065 J**	0.001 U	0.001 U	**0.00016 J**	**0.00018 J**
Mercury, Total	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Radiological (pCi/L)									
Radium-226	**0.224 J ± 0.0858**	0.106 U ± 0.0753	0.449 U ± 0.338	0.0176 U ± 0.286	0.0782 U ± 0.217	**0.186 ± 0.0813**	**0.193 ± 0.0924**	**0.184 ± 0.0749**	**0.250 ± 0.0868**
Radium-226 & 228	**0.774 ± 0.313**	**0.629 ± 0.338**	**0.911 ± 0.486**	**0.732 J ± 0.524**	0.640 U ± 0.561	**0.396 J ± 0.241**	**1.21 ± 0.369**	R	**0.483 J+ ± 0.253**
Radium-228	**0.550 ± 0.300**	**0.523 ± 0.330**	0.462 U ± 0.350	**0.714 ± 0.438**	0.562 U ± 0.517	0.209 U ± 0.227	**1.01 ± 0.357**	R	0.234 U ± 0.238

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CFR: Code of Federal Regulations
ft amsl: feet above mean sea level
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mg/L: milligram per liter
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mv: millivolt
NA: Not Applicable
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J+: value is estimated with a potentially high bias
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https://www.epa.gov/coalash/coal-ash-rule

TABLE II
SUMMARY OF ANALYTICAL RESULTS
F.B. CULLEY GENERATING STATION
NEWBURGH, INDIANA

Location Group	Downgradient								
Location Name	CCR-AP-6	CCR-AP-6	CCR-AP-6	CCR-AP-6	CCR-AP-6	CCR-AP-6	CCR-AP-6	CCR-AP-6	CCR-AP-6
Sample Name	CCR-AP-6-20160610	CCR-AP-6-20160812	CCR-AP-6-20161028	CCR-AP-6-20161207	CCR-AP-6-20170208	CCR-AP-6-20170406	CCR-AP-6-20170607	CCR-AP-6-20170929	CCR-AP-6-20171117
Sample Date	06/10/2016	08/12/2016	10/28/2016	12/07/2016	02/08/2017	04/06/2017	06/07/2017	09/29/2017	11/17/2017
Lab Sample ID	180-55667-6	180-57631-6	180-60350-6	180-61530-6	180-63329-6	180-65041-8	180-67233-6	180-70838-9	180-72640-6
Water Level (ft amsl)	357.44	357.42	357.81	357.84	357.16	357.22	357.77	358.13	358.29
Monitoring Program	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Detection
Field Parameters									
Temperature (Deg C)	**25.88**	**22.71**	**18.2**	**14.06**	**13.66**	**17.82**	**19.24**	**22.6**	**13.65**
Turbidity, Field (FNU)	-	-	-	-	-	-	-	-	-
Dissolved Oxygen, Field (mg/L)	**0.57**	**3.82**	**1.16**	**5.36**	**5.85**	**0.65**	**3.08**	**3.48**	**2**
Conductivity, Field (mS/cm)	**1.80952**	**1.894**	**1.45907**	**1.2681**	**1.79982**	**1.85853**	**1.69037**	**1.83685**	**1.78431**
ORP, Field (mv)	**-150.64**	**-113**	**-146.47**	**-215.4**	**-107.54**	**-104.62**	**-108.17**	**-241.24**	**-130.25**
Turbidity, Field (NTU)	**293.44**	**1073**	**1030**	**632.75**	**1329**	**397.33**	**1076**	**977.25**	**445.51**
pH, Field (su)	**6.88**	**7.56**	**7.28**	**7.31**	**7.19**	**7.17**	**7.35**	**7.44**	**7.07**
Detection Monitoring - EPA Appendix III Constituents (mg/L)									
Boron, Total	**1.1**	**0.83**	**0.74**	**0.79 J+**	**0.89 J+**	**2.2**	**1.3 J+**	**0.44**	**2.1 J+**
Calcium, Total	**180**	**190**	**190 J-**	**190**	**200 J-**	**210 J+**	**200**	**180**	**180**
Chloride (mg/L)	**40**	**39**	**38 J+**	**36**	**42**	**46**	**40**	**38**	**42**
Fluoride (mg/L)	**0.43**	**0.67**	**0.42**	**0.62**	**0.5**	**0.45**	**0.63**	**0.55**	**0.24**
Sulfate (mg/L)	**0.57 J-**	R	**0.98 J+**	1 U	**0.67 J**	**0.5 J**	**1.1**	**0.71 J**	**0.74 J-**
pH (lab) (su)	**7.35 J**	**7.8 J**	**7.2 J**	**7.3 J**	**7.4 J**	**7.2 J**	**7.3 J**	**7.3 J**	**7.6 J**
Total Dissolved Solids (TDS) (mg/L)	**1100**	**1100**	**1000**	**1000**	**1000**	**1100**	**1200**	**1100**	**1000**
Assessment Monitoring - EPA Appendix IV Constituents (mg/L)									
Antimony, Total	0.002 U	0.002 U	0.002 U	**0.00048 J**	**0.00047 J**	0.002 U	**0.00059 J**	**0.0014 J**	0.01 U
Arsenic, Total	**0.04**	**0.059**	**0.06**	**0.067**	**0.11**	**0.11**	**0.096**	**0.089**	**0.081**
Barium, Total	**0.51**	**0.58**	**0.55**	**0.62**	**0.61**	**0.64**	**0.6**	**0.55**	**0.49**
Beryllium, Total	0.001 U	**0.00026 J**	**0.00011 J**	**0.00036 J**	**0.00025 J**	**0.00024 J**	**0.00042 J**	**0.00039 J**	0.005 U
Cadmium, Total	0.001 U	**0.00016 J**	0.001 U	**0.00029 J**	**0.00027 J**	**0.00019 J**	**0.00024 J**	**0.00052 J**	**0.00039 J**
Chromium, Total	**0.0031**	**0.0092**	**0.005**	**0.015**	**0.011**	**0.0098**	**0.014**	**0.02**	**0.014**
Cobalt, Total	**0.0042**	**0.0095**	**0.0075 J**	**0.01**	**0.009**	**0.0069**	**0.011**	**0.012**	**0.0087**
Lead, Total	**0.0021**	**0.0071**	**0.0035 J**	**0.01**	**0.0079**	**0.0074 J+**	**0.0096**	**0.014**	**0.011**
Lithium, Total	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	**0.011 J**	0.05 U	0.25 U
Molybdenum, Total	**0.02**	**0.018**	**0.021**	**0.024**	**0.03**	**0.024**	**0.026**	**0.033**	**0.027**
Selenium, Total	**0.001 J**	**0.0014 J**	**0.0015 J**	**0.0014 J**	0.005 U	**0.0018 J-**	**0.0014 J**	**0.0023 J**	0.025 U
Thallium, Total	0.001 U	**0.000047 J**	0.001 U	**0.0001 J**	**0.000063 J**	0.001 U	**0.00009 J**	**0.00013 J**	0.005 U
Mercury, Total	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Radiological (pCi/L)									
Radium-226	**0.652 J ± 0.142**	**1.32 ± 0.278**	**1.38 ± 0.686**	-0.236 U ± 0.919	**0.929 ± 0.371**	**0.730 ± 0.221**	**2.33 ± 0.648**	**0.815 ± 0.227**	**0.695 ± 0.171**
Radium-226 & 228	**1.20 ± 0.325**	**2.13 ± 0.776**	**2.05 J ± 0.868**	1.58 U ± 1.80	**1.68 J ± 0.690**	**1.19 J ± 0.490**	**5.93 ± 1.60**	R	R
Radium-228	**0.543 ± 0.293**	0.811 U ± 0.725	0.663 U ± 0.532	1.58 U ± 1.55	0.755 U ± 0.581	0.455 U ± 0.438	**3.61 ± 1.47**	R	R

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F.B. CULLEY GENERATING STATION
NEWBURGH, INDIANA

Location Group	Downgradient								
Location Name	CCR-AP-8	CCR-AP-8	CCR-AP-8	CCR-AP-8	CCR-AP-8	CCR-AP-8	CCR-AP-8	CCR-AP-8	CCR-AP-8
Sample Name	CCR-AP8-20170309	CCR-AP-8-20170406	CCR-AP-8-20170426	CCR-AP-8-20170530	CCR-AP-8-20170607	CCR-AP-8-20170725	CCR-AP-8-20170815	CCR-AP-8-20170928	CCR-AP-8-20171117
Sample Date	03/09/2017	04/06/2017	04/26/2017	05/30/2017	06/07/2017	07/25/2017	08/15/2017	09/28/2017	11/17/2017
Lab Sample ID	180-64223-1	180-65041-1	180-65680-1	180-66910-1	180-67233-8	180-68557-1	180-69382-1	180-70838-10	180-72640-8
Water Level (ft amsl)	362.235	364.335	-	361.715	361.675	362.845	363.815	362.695	363.725
Monitoring Program	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Detection
Field Parameters									
Temperature (Deg C)	**19.68**	**14.06**	**23.49**	**24.86**	**20.32**	**24.02**	**27.23**	**19.71**	**14.18**
Turbidity, Field (FNU)	-	-	-	-	-	-	-	-	-
Dissolved Oxygen, Field (mg/L)	**3.19**	**2.37**	**3.52**	**0.3**	**2.73**	**2.33**	**0.89**	**2.22**	**2.99**
Conductivity, Field (mS/cm)	**2.39775**	**2.94999**	**2.50325**	**2.60564**	**2.35891**	**2.48464**	**2.48283**	**2.47995**	**2.47027**
ORP, Field (mv)	**-7.78**	**-90.85**	**-116.37**	**-115.14**	**-124.99**	**-66.59**	**-113.76**	**-159.16**	**-120.85**
Turbidity, Field (NTU)	**116.68**	**274.89**	**774.8**	**527.69**	**433.46**	**453.72**	**188.03**	**142.91**	**553**
pH, Field (su)	**6.14**	**7.09**	**6.95**	**6.86**	**7.26**	**7.9**	**6.43**	**6.78**	**6.92**
Detection Monitoring - EPA Appendix III Constituents (mg/L)									
Boron, Total	**0.037 J**	0.08 U	0.08 U	**0.034 J**	0.08 U	0.08 U	0.08 U	**0.025 J**	0.043 U
Calcium, Total	**300**	**320 J+**	**320**	**340**	**330**	**350**	**340**	**320**	**300**
Chloride (mg/L)	**21**	**19**	**18**	**17**	**13**	**17**	**16**	**17**	**16**
Fluoride (mg/L)	**0.13**	**0.35**	**0.28**	**0.24**	**0.21 J**	**0.24 J**	**0.26**	**0.34**	**0.4**
Sulfate (mg/L)	**37**	**16**	**1.6**	**6.2**	**4 J**	**3.8**	**5**	**2.3**	**1.9 J-**
pH (lab) (su)	**7.2 J**	**6.9 J**	**7 J**	**7.3 J**	**7 J**	**7 J**	**7.3 J**	**7 J**	**7 J**
Total Dissolved Solids (TDS) (mg/L)	**1400**	**1400**	**1400**	**1500**	**1500**	**1500**	**1400**	**1400**	**1300**
Assessment Monitoring - EPA Appendix IV Constituents (mg/L)									
Antimony, Total	**0.0018 J**	**0.00066 J**	**0.001 J**	**0.00082 J**	**0.0011 J**	0.002 U	**0.0014 J**	0.002 U	0.002 U
Arsenic, Total	**0.044**	**0.052**	**0.07**	**0.06**	**0.076**	**0.087**	**0.095**	**0.087**	**0.083**
Barium, Total	**0.57**	**0.59**	**0.59**	**0.58**	**0.6**	**0.67**	**0.64**	**0.56**	**0.53**
Beryllium, Total	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.0002 J**	**0.00039 J**	0.001 U	0.001 U
Cadmium, Total	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	**0.00016 J**	0.001 U	0.001 U
Chromium, Total	**0.0012 J**	**0.0022**	**0.0019 J**	**0.0028**	R	**0.0041**	**0.012**	**0.0021 J+**	**0.0021**
Cobalt, Total	**0.015**	**0.012**	**0.011**	**0.011**	**0.011**	**0.012**	**0.017**	**0.0098**	**0.0082**
Lead, Total	**0.00058 J**	**0.0011 J+**	**0.00081 J**	**0.0022**	**0.001**	**0.0025**	**0.0076**	**0.0011**	**0.0011**
Lithium, Total	0.05 U	0.05 U	**0.014 J**	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U	0.05 U
Molybdenum, Total	**0.014**	**0.015**	**0.014**	**0.013**	**0.014**	**0.014**	**0.015**	**0.012**	**0.012**
Selenium, Total	0.005 U	**0.0017 J-**	**0.0015 J**	**0.0017 J**	**0.0017 J**	**0.0015 J**	**0.0022 J**	**0.002 J**	0.005 U
Thallium, Total	0.001 U	0.001 U	0.001 U	0.001 U	**0.000068 J**	**0.000058 J**	**0.00015 J**	0.001 U	**0.00029 J**
Mercury, Total	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Radiological (pCi/L)									
Radium-226	**0.893 ± 0.233**	**1.34 ± 0.310**	**0.883 ± 0.196**	**0.720 ± 0.162**	**0.721 J ± 0.211**	**0.704 ± 0.201**	**0.513 ± 0.143**	**0.529 ± 0.153**	**0.640 ± 0.164**
Radium-226 & 228	**1.96 J ± 1.04**	**2.01 ± 0.534**	**1.66 ± 0.421**	**1.18 ± 0.327**	**2.32 J ± 0.594**	**1.59 J ± 0.754**	**0.829 J ± 0.337**	R	R
Radium-228	1.07 U ± 1.02	**0.677 ± 0.435**	**0.778 ± 0.372**	**0.457 ± 0.284**	**1.60 J ± 0.556**	0.889 U ± 0.726	0.316 U ± 0.305	R	R

ABBREVIATIONS AND NOTES:

CCR: Coal Combustion Residuals
CFR: Code of Federal Regulations
ft amsl: feet above mean sea level
MCL: Maximum Contaminant Level
mg/L: milligram per liter
mS/cm: milliSiemen per centimeter
mv: millivolt
NA: Not Applicable
NTU: Nephelometric Turbidity Units
pCi/L: picoCurie per liter
su: standard units
USEPA: United States Environmental Protection Agency

QUALIFIERS:

J: value is estimated
J+: value is estimated with a potentially high bias
J-: value is estimated with a potentially low bias
R: value is rejected
U: Not detected value is the laboratory reporting limit

- USEPA. 2016. Final Rule: Disposal of Coal Combustion Residuals from Electric Utilities. July 26. 40 CFR Part 257. https://www.epa.gov/coalash/coal-ash-rule

TABLE II
SUMMARY OF ANALYTICAL RESULTS
F.B. CULLEY GENERATING STATION
NEWBURGH, INDIANA

Location Group	Upgradient								
Location Name	CCR-AP-1R	CCR-AP-1R	CCR-AP-1R	CCR-AP-1R	CCR-AP-1R	CCR-AP-1R	CCR-AP-1R	CCR-AP-1R	CCR-AP-1R
Sample Name	CCR-AP-1-20160610	CCR-AP-1-20160812	CCR-AP-1-20161028	CCR-AP-1-20161207	CCR-AP-1-20170208	CCR-AP-1-20170406	CCR-AP-1-20170607	CCR-AP-1-20170928	CCR-AP-1 -20171117
Sample Date	06/10/2016	08/12/2016	10/28/2016	12/07/2016	02/08/2017	04/06/2017	06/07/2017	09/28/2017	11/17/2017
Lab Sample ID	180-55667-1	180-57631-1	180-60350-1	180-61530-1	180-63329-1	180-65041-3	180-67233-1	180-70838-5	180-72640-1
Water Level (ft amsl)	388.98	388.07	387.44	386.93	388.04	388.09	388.06	388.5	387.6
Monitoring Program	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Detection
Field Parameters									
Temperature (Deg C)	**21.31**	**25.58**	**20.76**	**8.43**	**10.31**	**14.42**	**19.36**	**18.61**	**13.03**
Turbidity, Field (FNU)	-	-	-	-	-	-	-	-	-
Dissolved Oxygen, Field (mg/L)	**1.28**	**0.13**	**0.6**	**11.68**	**8.29**	**3.13**	**3.2**	**1.01**	**8.88**
Conductivity, Field (mS/cm)	**1.12255**	**1.991**	**1.04547**	**1.0845**	**1.19011**	**1.55613**	**1.10803**	**1.20077**	**1.21515**
ORP, Field (mv)	**-148.68**	**-11.7**	**-171.8**	**-247.3**	**-60.52**	**15.79**	**90.06**	**-41.88**	**-14.37**
Turbidity, Field (NTU)	**1225**	**53.02**	**459.55**	**1053**	**1350**	**335.21**	**86.58**	**3.49**	**7.28**
pH, Field (su)	**7.38**	**7.87**	**7.85**	**8.12**	**8**	**8.01**	**8.33**	**7.46**	**7.72**
Detection Monitoring - EPA Appendix III Constituents (mg/L)									
Boron, Total	**0.51**	**0.54**	**0.65**	**0.68 J+**	**0.69 J+**	**0.62**	**0.72 J+**	**0.44**	**0.82 J+**
Calcium, Total	**53**	**51**	**50 J-**	**44**	**42 J-**	**55 J+**	**55**	**48**	**57**
Chloride (mg/L)	**19**	**18**	**19 J+**	**19**	**18**	**17**	**18**	**18**	**18**
Fluoride (mg/L)	**0.81**	**0.48**	**0.5**	**0.55**	**0.53**	**0.57**	**0.58**	**0.49**	**0.48**
Sulfate (mg/L)	**180 J-**	**180**	**110 J+**	**130**	**140**	**150**	**150**	**160**	**170 J-**
pH (lab) (su)	**7.74 J**	**8.1 J**	**7.6 J**	**7.7 J**	**7.5 J**	**7.8 J**	**7.7 J**	**7.7 J**	**7.9 J**
Total Dissolved Solids (TDS) (mg/L)	**740**	**760**	**740**	**710**	**750**	**730**	**840**	**770**	**770**
Assessment Monitoring - EPA Appendix IV Constituents (mg/L)									
Antimony, Total	0.002 U	0.002 U	0.002 U	**0.00072 J**	**0.00077 J**	**0.00055 J**	**0.00053 J**	**0.0025**	0.01 U
Arsenic, Total	**0.0045**	**0.0067**	**0.0024**	**0.0036**	**0.0068**	**0.012**	**0.008**	**0.0055**	**0.0075**
Barium, Total	**0.077**	**0.12**	**0.05**	**0.081**	**0.11**	**0.16**	**0.11**	**0.086**	**0.15**
Beryllium, Total	**0.00053 J**	**0.00074 J**	**0.00011 J**	**0.00049 J**	**0.00058 J**	**0.0014**	**0.00073 J**	**0.00035 J**	**0.0013 J**
Cadmium, Total	0.001 U	0.001 U	0.001 U	0.001 U	**0.000081 J**	**0.00018 J**	0.001 U	0.001 U	0.005 U
Chromium, Total	**0.011**	**0.02**	**0.0019 J**	**0.0092**	**0.012**	**0.03**	**0.015**	**0.01**	**0.021**
Cobalt, Total	**0.0081**	**0.014**	**0.0015 J**	**0.005**	**0.0083**	**0.017**	**0.0088**	**0.0059**	**0.013**
Lead, Total	**0.0074**	**0.013**	**0.0011 J**	**0.0057**	**0.0083**	**0.02 J+**	**0.0093**	**0.0068**	**0.014**
Lithium, Total	**0.045 J**	**0.053**	**0.035 J**	**0.035 J**	**0.043 J**	**0.063**	**0.049 J**	**0.036 J**	**0.059 J**
Molybdenum, Total	**0.015**	**0.013**	**0.006**	**0.0047 J**	**0.0073**	**0.0067**	**0.0073**	**0.008**	**0.013 J**
Selenium, Total	**0.00071 J**	**0.0014 J**	0.005 U	**0.00045 J**	0.005 U	**0.0014 J-**	0.005 U	0.005 U	0.025 U
Thallium, Total	**0.000082 J**	**0.00012 J**	0.001 U	**0.000079 J**	**0.00033 J**	0.001 U	**0.00012 J**	**0.000088 J**	**0.0014 J**
Mercury, Total	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Radiological (pCi/L)									
Radium-226	**0.607 J ± 0.204**	**3.13 ± 0.594**	0.353 U ± 0.558	1.75 U ± 1.31	**2.99 ± 0.678**	**2.28 ± 0.580**	**1.74 ± 0.489**	**1.94 ± 0.553**	**3.33 ± 0.689**
Radium-226 & 228	0.950 U ± 0.690	**6.32 ± 1.51**	0.862 U ± 0.753	2.09 U ± 1.98	**6.56 ± 1.18**	**6.73 J ± 1.47**	**5.00 ± 1.19**	**6.46 ± 1.53**	R
Radium-228	0.344 U ± 0.659	**3.20 ± 1.39**	0.509 U ± 0.505	0.340 U ± 1.48	**3.58 ± 0.962**	**4.45 ± 1.35**	**3.25 ± 1.09**	**4.52 ± 1.43**	R

ABBREVIATIONS AND NOTES:

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CFR: Code of Federal Regulations
ft amsl: feet above mean sea level
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mg/L: milligram per liter
mS/cm: milliSiemen per centimeter
mv: millivolt
NA: Not Applicable
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J: value is estimated
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https://www.epa.gov/coalash/coal-ash-rule

TABLE II
SUMMARY OF ANALYTICAL RESULTS
F.B. CULLEY GENERATING STATION
NEWBURGH, INDIANA

Location Group	Upgradient								
Location Name	CCR-AP-7	CCR-AP-7	CCR-AP-7	CCR-AP-7	CCR-AP-7	CCR-AP-7	CCR-AP-7	CCR-AP-7	CCR-AP-7
Sample Name	CCR-AP-7-20160610	CCR-AP-7-20160812	CCR-AP-7-20161028	CCR-AP-7-20161207	CCR-AP-7-20170208	CCR-AP-7-20170406	CCR-AP-7-20170607	CCR-AP-7-20170928	CCR-AP-7-20171117
Sample Date	06/10/2016	08/12/2016	10/28/2016	12/07/2016	02/08/2017	04/06/2017	06/07/2017	09/28/2017	11/17/2017
Lab Sample ID	180-55667-7	180-57631-7	180-60350-7	180-61530-7	180-63329-7	180-65041-9	180-67233-7	180-70838-3	180-72640-7
Water Level (ft amsl)	427.57	421.87	418.13	420.84	428.16	429.3	422.65	417.49	419.55
Monitoring Program	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Detection
Field Parameters									
Temperature (Deg C)	**20.27**	**19.2**	**22.01**	**15.31**	**13.89**	**16.15**	**16.62**	**17.93**	**14.47**
Turbidity, Field (FNU)	-	-	-	-	-	-	-	**11.09**	-
Dissolved Oxygen, Field (mg/L)	**0.21**	**0.15**	**0.69**	**0.23**	**-0.02**	**-0.02**	**0.09**	**0.13**	**0.21**
Conductivity, Field (mS/cm)	**0.96343**	**0.9769**	**0.90788**	**0.76817**	**1.00796**	**1.578**	**0.98246**	**0.97415**	**0.97231**
ORP, Field (mv)	**-105.35**	**-152**	**-141.57**	**-146.4**	**-80.23**	**-115.03**	**-143.84**	**-153.3**	**-103.98**
Turbidity, Field (NTU)	**27.02**	**18.9**	**207.68**	**370.05**	**385.27**	**519.28**	**193.1**	-	**3.04**
pH, Field (su)	**7.05**	**7.13**	**7.77**	**7.34**	**7.21**	**7.24**	**7.18**	**7.11**	**7.02**
Detection Monitoring - EPA Appendix III Constituents (mg/L)									
Boron, Total	**0.034 J+**	0.034 U	**0.02 J+**	0.071 U	0.034 U	0.08 U	0.15 U	**0.056 J**	0.091 U
Calcium, Total	**86**	**88**	**120 J-**	**99**	**150 J-**	**110 J+**	**100**	**94**	**96**
Chloride (mg/L)	**31**	**26**	**25 J+**	**26**	**25**	**27**	**28**	**29**	**31**
Fluoride (mg/L)	R	**0.24**	**0.25**	**0.37 J+**	**0.28 J+**	**0.29**	**0.34**	**0.19**	**0.25**
Sulfate (mg/L)	**93 J-**	**73**	**66 J+**	**96**	**110**	**110**	**100**	**82**	**77 J-**
pH (lab) (su)	**7.37 J**	**7.9 J**	**7.1 J**	**7.4 J**	**7.4 J**	**7.3 J**	**7.3 J**	**7.3 J**	**7.2 J**
Total Dissolved Solids (TDS) (mg/L)	**590**	**580**	**530**	**620**	**630**	**640**	**620**	**570**	**550**
Assessment Monitoring - EPA Appendix IV Constituents (mg/L)									
Antimony, Total	0.002 U	0.002 U	0.002 U	**0.00016 J**	**0.00062 J**	0.002 U	0.002 U	0.002 U	0.002 U
Arsenic, Total	**0.0025**	**0.0048**	**0.0084**	**0.0083**	**0.018**	**0.008**	**0.0075**	**0.0058**	**0.0034**
Barium, Total	**0.1**	**0.12**	**0.16**	**0.14**	**0.19**	**0.15**	**0.15**	**0.12**	**0.11**
Beryllium, Total	0.001 U	0.001 U	**0.00017 J**	**0.00012 J**	**0.00075 J**	**0.00022 J**	**0.00015 J**	0.001 U	0.001 U
Cadmium, Total	0.001 U	0.001 U	0.001 U	0.001 U	**0.00032 J**	**0.00014 J**	0.001 U	0.001 U	0.001 U
Chromium, Total	**0.00048 J**	**0.00047 J**	**0.0026**	**0.0039**	**0.019**	**0.0048**	**0.0039 J+**	0.002 U	0.002 U
Cobalt, Total	**0.0012**	**0.0023**	**0.0053 J**	**0.0037**	**0.015**	**0.0054**	**0.0032**	**0.00054**	**0.0003 J**
Lead, Total	**0.00062 J**	**0.00099 J**	**0.0082 J**	**0.0036**	**0.02**	**0.0087 J+**	**0.0041**	0.001 U	0.001 U
Lithium, Total	**0.01 J**	**0.011 J**	**0.02 J**	**0.012 J**	**0.039 J**	**0.019 J**	**0.019 J**	**0.01 J**	**0.012 J**
Molybdenum, Total	**0.0082**	**0.0054**	**0.0044 J**	**0.0088**	**0.013**	**0.0058**	**0.0069**	**0.0036 J**	**0.0028 J**
Selenium, Total	**0.00035 J**	0.005 U	**0.00073 J**	0.005 U	0.005 U	0.005 UJ	0.005 U	0.005 U	0.005 U
Thallium, Total	0.001 U	0.001 U	**0.00008 J**	**0.000066 J**	**0.00061 J**	0.001 U	**0.000088 J**	0.001 U	0.001 U
Mercury, Total	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Radiological (pCi/L)									
Radium-226	**0.330 J ± 0.0973**	**0.390 ± 0.118**	**1.28 ± 0.664**	0.439 U ± 0.399	**0.744 ± 0.220**	**0.719 ± 0.182**	**0.398 ± 0.129**	**0.308 ± 0.0950**	**0.312 ± 0.0954**
Radium-226 & 228	**0.496 ± 0.284**	**1.02 J ± 0.363**	**1.72 J ± 0.792**	**0.997 ± 0.602**	**1.11 J ± 0.335**	**1.55 ± 0.464**	**1.29 ± 0.433**	R	R
Radium-228	0.166 U ± 0.267	**0.625 J ± 0.344**	0.434 U ± 0.433	0.558 U ± 0.451	0.365 U ± 0.252	**0.830 ± 0.427**	**0.895 ± 0.413**	R	R

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SUMMARY OF ANALYTICAL RESULTS
F.B. CULLEY GENERATING STATION
NEWBURGH, INDIANA

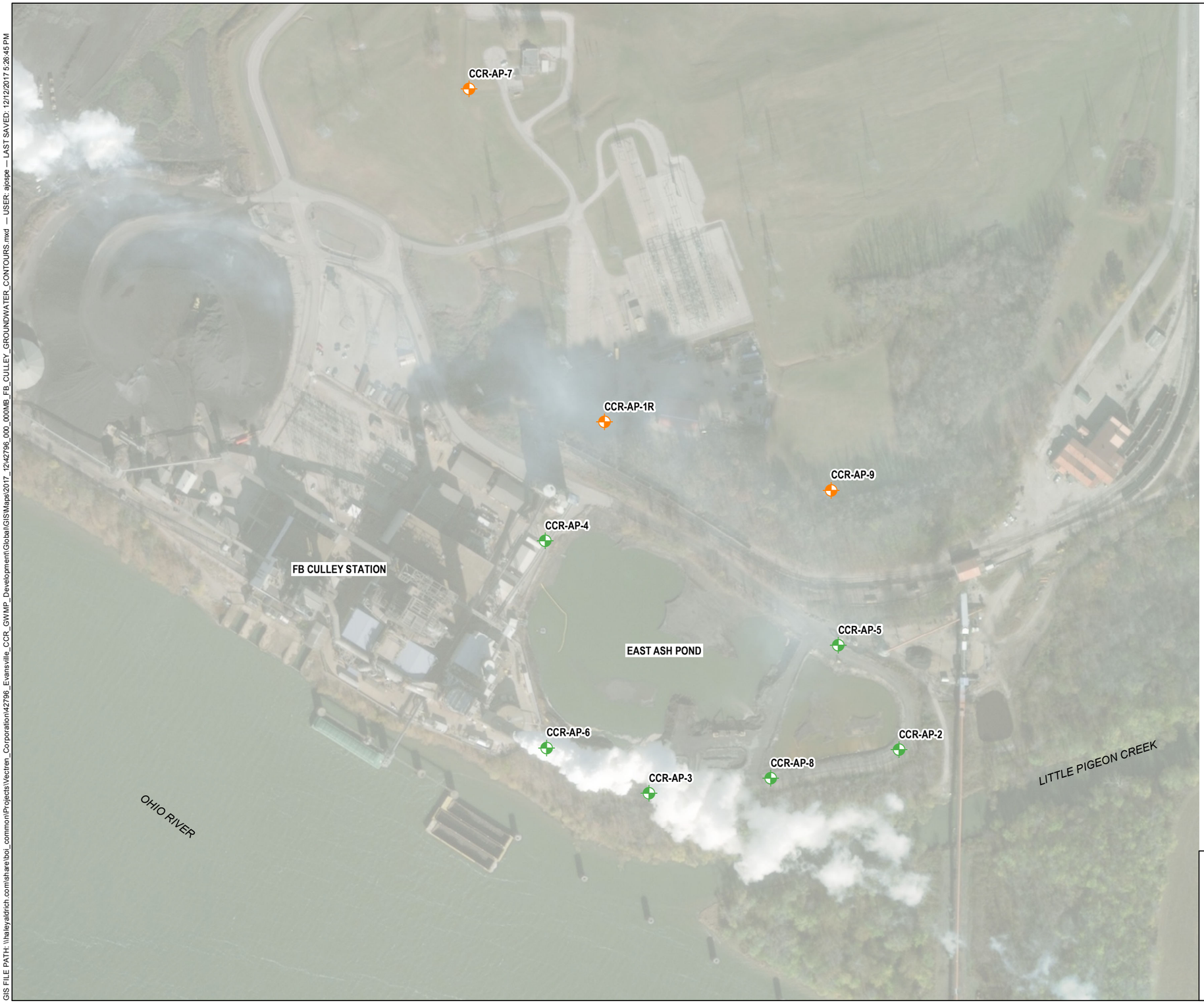
Location Group	Upgradient								
Location Name	CCR-AP-9	CCR-AP-9	CCR-AP-9	CCR-AP-9	CCR-AP-9	CCR-AP-9	CCR-AP-9	CCR-AP-9	CCR-AP-9
Sample Name	CCR-AP9-20170309	CCR-AP-9-20170407	CCR-AP-9-20170426	CCR-AP-9-20170530	CCR-AP-9-20170608	CCR-AP-9-20170725	CCR-AP-9-20170815	CCR-AP-9-20170928	CCR-AP-9-20171117
Sample Date	03/09/2017	04/07/2017	04/26/2017	05/30/2017	06/08/2017	07/25/2017	08/15/2017	09/28/2017	11/17/2017
Lab Sample ID	180-64223-2	180-65041-2	180-65680-2	180-66910-2	180-67233-9	180-68557-2	180-69382-2	180-70838-4	180-72640-9
Water Level (ft amsl)	386.205	387.795	-	387.155	386.475	384.785	384.755	384.775	385.425
Monitoring Program	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Baseline	Detection
Field Parameters									
Temperature (Deg C)	**22.55**	**14.76**	**21.56**	**19.42**	**19.39**	**15.07**	**22.98**	**17.42**	**13.11**
Turbidity, Field (FNU)	-	-	-	-	-	-	-	-	-
Dissolved Oxygen, Field (mg/L)	**3.72**	**4.25**	**4.36**	**3.16**	**2.56**	**0.99**	**3.39**	**3.76**	**2.38**
Conductivity, Field (mS/cm)	**0.00137**	**1.2589**	**0.8002**	**0.97237**	**0.33375**	**0.00135**	**0.99112**	**1.00763**	**1.04212**
ORP, Field (mv)	**-33.4**	**-38**	**-4.1**	**72.93**	**15.83**	**107.35**	**66.57**	**-25.8**	**-38.27**
Turbidity, Field (NTU)	**2810**	**1444**	**2275**	**1494**	**1873**	**1663**	**2320**	**2008**	**1760**
pH, Field (su)	**7.61**	**8.25**	**7.38**	**6.09**	**9.11**	**7.78**	**7.73**	**7.44**	**7.31**
Detection Monitoring - EPA Appendix III Constituents (mg/L)									
Boron, Total	**0.2**	**0.23**	**0.26 J+**	**0.26**	0.29 U	**0.25**	**0.22**	**0.29**	0.34 U
Calcium, Total	**92**	**110 J+**	**110**	**120**	**120**	**130**	**130**	**110**	**130**
Chloride (mg/L)	**23**	**21**	**21**	**19**	**20**	**19**	**18**	**17**	**16**
Fluoride (mg/L)	**0.14**	**0.36**	**0.35**	**0.33**	**0.42**	**0.3**	**0.33**	**0.3**	**0.36**
Sulfate (mg/L)	**130**	**120**	**120**	**110**	**110**	**90**	**110**	**120**	**120 J-**
pH (lab) (su)	**7.5 J**	**7.4 J**	**7.5 J**	**7.7 J**	**7.6 J**	**7.4 J**	**7.5 J**	**7.5 J**	**7.4 J**
Total Dissolved Solids (TDS) (mg/L)	**550**	**610**	**590**	**600**	**600**	**650**	**600**	**620**	**620**
Assessment Monitoring - EPA Appendix IV Constituents (mg/L)									
Antimony, Total	**0.0044**	**0.0014 J**	**0.0012 J**	**0.0011 J**	**0.0014 J**	0.002 U	**0.00078 J**	0.002 U	**0.0079 J+**
Arsenic, Total	**0.0031**	**0.006**	**0.008**	**0.01**	**0.0077**	**0.01**	**0.0087**	**0.0058**	**0.0088**
Barium, Total	**0.13**	**0.23**	**0.23**	**0.27**	**0.21**	**0.28**	**0.24**	**0.21**	**0.29**
Beryllium, Total	**0.00017 J**	**0.00053 J**	**0.00066 J**	**0.00092 J**	**0.00047 J**	**0.0011**	**0.00073 J**	**0.00017 J**	**0.00095 J**
Cadmium, Total	**0.000079 J**	**0.000095 J**	**0.00011 J**	**0.00015 J**	**0.00011 J**	**0.00022 J**	**0.00014 J**	0.001 U	0.005 U
Chromium, Total	**0.0042**	**0.0088**	**0.012**	**0.014**	**0.0088**	**0.02**	**0.013**	**0.0067**	**0.019**
Cobalt, Total	**0.0062**	**0.012**	**0.013**	**0.013**	**0.0096**	**0.014**	**0.016**	**0.0072**	**0.015**
Lead, Total	**0.0025**	**0.0073 J+**	**0.0069**	**0.012**	**0.0056**	**0.011**	**0.0098**	**0.0033**	**0.0098**
Lithium, Total	**0.03 J**	**0.033 J**	**0.04 J**	**0.04 J**	**0.034 J**	**0.048 J**	**0.036 J**	**0.029 J**	**0.05 J**
Molybdenum, Total	**0.011**	**0.0097**	**0.0071**	**0.0065**	**0.0059**	**0.0059**	**0.0027 J**	**0.0043 J**	**0.0069 J**
Selenium, Total	**0.0058**	0.005 UJ	0.005 U	0.005 U	0.005 U	0.005 U	**0.0014 J**	0.005 U	0.025 U
Thallium, Total	0.001 U	0.001 U	**0.000098 J**	**0.00018 J**	**0.0001 J**	**0.00016 J**	**0.00011 J**	0.001 U	**0.00062 J**
Mercury, Total	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U	0.0002 U
Radiological (pCi/L)									
Radium-226	R	**1.62 ± 0.470**	**1.91 ± 0.393**	**0.614 ± 0.173**	**1.43 ± 0.332**	**0.962 ± 0.286**	**1.68 ± 0.304**	**2.05 ± 0.533**	**1.38 ± 0.300**
Radium-226 & 228	0.934 UJ ± 0.938	**3.23 J ± 1.10**	**4.02 ± 0.905**	**1.23 J ± 0.447**	**3.49 ± 0.747**	**1.61 ± 0.510**	R	**3.52 J+ ± 1.13**	R
Radium-228	0.401 U ± 0.915	**1.61 ± 0.989**	**2.11 ± 0.815**	0.619 U ± 0.412	**2.06 ± 0.670**	**0.644 ± 0.422**	R	1.47 U ± 0.995	R

ABBREVIATIONS AND NOTES:
CCR: Coal Combustion Residuals
CFR: Code of Federal Regulations
ft amsl: feet above mean sea level
MCL: Maximum Contaminant Level
mg/L: milligram per liter
mS/cm: milliSiemen per centimeter
mv: millivolt
NA: Not Applicable
NTU: Nephelometric Turbidity Units
pCi/L: picoCurie per liter
su: standard units
USEPA: United States Environmental Protection Agency

QUALIFIERS:
J: value is estimated
J+: value is estimated with a potentially high bias
J-: value is estimated with a potentially low bias
R: value is rejected
U: Not detected value is the laboratory reporting limit

- USEPA. 2016. Final Rule: Disposal of Coal Combustion Residuals from Electric Utilities. July 26. 40 CFR Part 257. https://www.epa.gov/coalash/coal-ash-rule

FIGURES



LEGEND

- UPGRADIENT MONITORING WELL
- DOWNGRADIENT MONITORING WELL

NOTES

1. AERIAL IMAGERY SOURCE: ESRI
2. LOCATIONS DERIVED FROM THREE I DESIGN DATA.

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SCALE IN FEET

HALEY ALDRICH

VECTREN CORPORATION
F.B. CULLEY GENERATING STATION
3711 DARLINGTON ROAD
NEWBURGH, INDIANA

MONITORING WELL NETWORK

JANUARY 2018

FIGURE 1

GIS FILE PATH: \\haleyaldrich.com\share\boi_common\Projects\Vectren_Corporation\42796_Evansville_CCR_GWMP_Development\Global\GIS\Maps\2017_12\42796_000_000MB_FB_CULLEY_GROUNDWATER_CONTOURS.mxd — USER: ajospe — LAST SAVED: 12/12/2017 5:26:45 PM