ENVIRONMENTAL • GEOTECHNICAL
BUILDING SCIENCES • MATERIALS TESTING

ATC Group Services LLC

7988 Centerpoint Dr.
Suite 100
Indianapolis, IN 46256

Phone +1 317 849 4990
Fax +1 317 849 4278

www.atcgroupservices.com

January 31, 2018

Mr. Lon Petts
Hoosier Energy REC, Inc.
P.O. Box 908
Bloomington, Indiana 47402

Re: **CCR Annual Groundwater Monitoring and Corrective Action Report**
Merom Generating Station – Area 3 Landfill
CCR Monitoring System
5500 West Old Highway 54
Sullivan County, Indiana
ATC Project No. 170LF00147

Dear Mr. Petts:

ATC Group Services LLC (ATC) has prepared this 2017 CCR Annual Groundwater Monitoring and Corrective Action Report for the bedrock aquifer groundwater monitoring system at the Hoosier Energy REC, Inc. (Hoosier Energy) Merom Generating Station located outside Sullivan, Sullivan 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 Area 3 Landfill and summarizes information required by § 257.90(e)(1) through § 257.90(e)(5).

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

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

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

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

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

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

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

§ 257.90(e)(1) A map, aerial image, or diagram showing the CCR unit and all background (or upgradient) and downgradient monitoring wells, to include the well identification numbers, that are part of the groundwater monitoring program for the CCR unit;

Hoosier Energy operates the Merom Generating Station, located approximately six miles west of Sullivan, Indiana. It is located at 5500 West Old Highway 54, Sullivan, Indiana. A Vicinity Map is provided as Figure 1. A map showing the location of the CCR management unit and associated upgradient and downgradient monitoring wells is provided as Figure 2. This information was previously presented in the Hoosier Energy Monitoring Well Installation Report, dated August 15, 2016.

§ 257.90(e)(2) Identification of any monitoring wells that were installed or decommissioned during the preceding year, along with a narrative description of why those actions were taken;

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

The CCR groundwater monitoring system at the Merom Generating Station Area 3 Landfill consists of eight monitoring wells: SWW-40, SWW-41, SWW-42, SWW-43, SWW-44, SWW-45, SWW-46, and SWW-47. The wells were installed in accordance with the requirements of Federal CCR Rule §257.91 between December 7, 2015 and January 21, 2016. Monitoring wells SWW-40, SWW-46, and SWW-47 are considered upgradient wells. The location of the CCR monitoring well network is depicted on Figure 2.

Documentation of the design and construction of the monitoring well network for the Area 3 Landfill is included in the Hoosier Energy Monitoring Well Installation Report, dated August 15, 2016.

§ 257.90(e)(3) In addition to all the monitoring data obtained under § 257.90 through § 257.98, a summary including the number of groundwater samples that were collected for analysis for each background and downgradient well, the dates the samples were collected, and whether the sample was required by the detection monitoring or assessment monitoring programs;

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

Table 1 provides a summary of the number of samples collected at each well, sampling dates, and designation of whether samples were required by the detection or assessment monitoring program. Groundwater analytical results for samples collected during 2016 and 2017 are summarized in Tables 2 through 11.

§ 257.90(e)(4) A narrative discussion of any transition between monitoring programs (e.g., the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase over background levels);

Consistent with § 257.90(e), the 2017 annual report documents activities conducted during the prior calendar year at the CCR management units subject to the Rule. The statistical analysis of the initial minimum eight rounds of groundwater sampling was not completed in 2017 and therefore is not reported in this Annual Report. A narrative discussion of any transition between monitoring programs (e.g., the date and circumstances for transitioning from detection monitoring to assessment monitoring in addition to identifying the constituent(s) detected at a statistically significant increase over background levels) will be provided, as appropriate, in subsequent annual reports.

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

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

We appreciate the opportunity to assist with Hoosier Energy's CCR Rule groundwater monitoring program at Merom Generating Station's Area 3 Landfill. Please contact any of the undersigned at 317.849.4990 if you have any questions regarding this report.

Sincerely,

Mark E. Breting

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

John R Noel

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

TABLES

Table 1
Well Sampling Summary
Merom Generating Station
Sullivan, Indiana
ATC Project No. 170LF00147

Identification	Date Installed	Background or Downgradient	Number of Samples	Sample Date	Detection or Assessment Monitoring
SWW-40 (PZ-5)	12/11/2015	Background	9	3/28/2016 6/16/2016 9/27/2016 11/14/2016 1/11/2017 3/14/2017 5/9/2017 7/5/2017 9/5/2017	Detection
SWW-41 (PZ-4)	12/19/2015	Downgradient	9	3/28/2016 6/16/2016 9/27/2016 11/14/2016 1/11/2017 3/14/2017 5/9/2017 7/5/2017 9/5/2017	Detection
SWW-42 (PZ-3)	12/16/2015	Downgradient	9	3/28/2016 6/16/2016 9/27/2016 11/14/2016 1/11/2017 3/14/2017 5/10/2017 7/6/2017 9/5/2017	Detection
SWW-43 (PZ-2)	1/5/2016	Downgradient	9	3/28/2016 6/17/2016 9/27/2016 11/14/2016 1/11/2017 3/14/2017 5/10/2017 7/6/2017 9/5/2017	Detection
SWW-44 (PZ-1)	1/7/2016	Downgradient	9	3/28/2016 6/16/2016 9/27/2016 11/14/2016 1/11/2017 3/14/2017 5/10/2017 7/6/2017 9/6/2017	Detection
SWW-45 (PZ-8)	1/14/2016	Downgradient	9	3/29/2016 6/16/2016 9/27/2016 11/14/2016 1/11/2017 3/14/2017 5/9/2017 7/6/2017 9/6/2017	Detection

Table 1
Well Sampling Summary
Merom Generating Station
Sullivan, Indiana
ATC Project No. 170LF00147

Identification	Date Installed	Background or Downgradient	Number of Samples	Sample Date	Detection or Assessment Monitoring
SWW-46 (PZ-7)	1/21/2016	Background	9	3/29/2016	Detection
				6/17/2016	
				9/27/2016	
				11/14/2016	
				1/11/2017	
				3/14/2017	
				5/9/2017	
				7/5/2017	
				9/6/2017	
SWW-47 (PZ-6)	1/19/2016	Background	9	3/29/2016	Detection
				6/17/2016	
				9/27/2016	
				11/14/2016	
				1/11/2017	
				3/14/2017	
				5/9/2017	
				7/5/2017	
				8/18/2017*	
				9/6/2017	

Notes: * A resample for TDS at SWW-47 was completed on August 18, 2017. It is not counted as a unique sample.

Table 2

Analytical Data Summary for 3/28/2016 to 3/29/2016

Constituents	Units	SWW-40	SWW-41	SWW-42	SWW-43	SWW-44	SWW-45	SWW-46	SWW-47
Antimony	ug/L	1.2	<1.0	1.9	<1.0	<1.0	4.3	3.4	<2.0
Arsenic	ug/L	2.5	5.9	2.3	2.5	3.1	8.5	6.3	79.5
Barium	ug/L	127.0	322.0	151.0	95.2	114.0	152.0	193.0	2520.0
Beryllium	ug/L	.55	2.90	<.20	<.20	<.20	.21	.25	27.40
Boron	ug/L	624	1130	1200	918	994	712	769	536
Cadmium	ug/L	<2	<2	<2	<2	<2	<2	<2	2
Calcium	ug/L	24500	12200	5690	11900	7970	8650	9740	135000
Chloride	mg/L	37.7	241.0	287.0	300.0	304.0	280.0	306.0	33.2
Chromium	ug/L	19.3	78.2	<10.0	<10.0	<10.0	<10.0	<10.0	556.0
Cobalt	ug/L	3.8	23.4	1.7	<1.0	<1.0	1.7	2.2	382.0
Fluoride	mg/L	1.3	5.4	4.8	2.8	4.6	3.5	3.6	<.1
Lead	ug/L	<10.0	22.7	<10.0	<10.0	<10.0	<10.0	<10.0	330.0
Lithium	ug/L	27.4	94.5	25.2	<20.0	24.2	27.6	33.0	744.0
Mercury	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Molybdenum	ug/L	22.8	<10.0	<10.0	<10.0	14.1	<10.0	<10.0	14.4
pH	SU	7.76	8.42	8.75	8.27	8.49	8.50	8.42	7.91
Selenium	ug/L	<1	<1	<1	<1	<1	<1	<1	<40
Sulfate	mg/L	55.4	3.3	1.4	7.9	20.6	14.0	12.9	8.5
Thallium	ug/L	<1	<1	<1	<1	<1	<1	<1	<2
Total dissolved solids	mg/L	648	1710	1370	1240	1420	1200	1220	

* - The displayed value is the arithmetic mean of multiple database matches.

Table 3

Analytical Data Summary for 6/16/2016 to 6/17/2016

Constituents	Units	SWW-40	SWW-41	SWW-42	SWW-43	SWW-44	SWW-45	SWW-46	SWW-47
Antimony	ug/L	<1.0	<1.0	<1.0	<1.0	1.2	1.3	3.9	<1.0
Arsenic	ug/L	1.9	3.3	3.7	2.5	3.0	5.5	7.4	6.7
Barium	ug/L	80.8	165.0	329.0	94.4	93.1	188.0	243.0	577.0
Beryllium	ug/L	<.20	.80	.95	<.20	<.20	<.20	1.40	3.70
Boron	ug/L	611	1060	1270	973	1050	782	756	352
Cadmium	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Calcium	ug/L	9180	6920	9920	11800	5900	7460	8280	32400
Chloride	mg/L	67.7	245.0	278.0	305.0	334.0	355.0	191.0	56.1
Chromium	ug/L	<10.0	22.8	30.1	<10.0	<10.0	<10.0	40.2	65.7
Cobalt	ug/L	<1.0	5.0	9.1	<1.0	<1.0	<1.0	9.9	27.9
Fluoride	mg/L	1.30	3.60	3.10	1.90	3.00	2.30	2.50	.23
Lead	ug/L	<10.0	<10.0	10.8	<10.0	<10.0	<10.0	12.3	48.4
Lithium	ug/L	<20.0	46.6	56.9	<20.0	24.5	29.8	51.3	104.0
Mercury	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Molybdenum	ug/L	22.1	<10.0	<10.0	<10.0	<10.0	<10.0	15.5	20.0
pH	SU	8.12	8.32	8.67	8.05	8.43	7.88	8.27	8.14
Selenium	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	58.6	3.0	1.5	3.3	13.5	9.1	19.5	23.5
Thallium	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Total dissolved solids	mg/L	668	1650	1640	1330	1490	1420	1390	910

* - The displayed value is the arithmetic mean of multiple database matches.

Table 4

Analytical Data Summary for 9/27/2016

Constituents	Units	SWW-40	SWW-41	SWW-42	SWW-43	SWW-44	SWW-45	SWW-46	SWW-47
Antimony	ug/L	<1.0	<1.0	<1.0	<1.0	1.6	1.2	3.9	<1.0
Arsenic	ug/L	1.8	3.6	2.2	2.2	3.1	6.1	9.8	18.8
Barium	ug/L	76.8	140.0	212.0	91.2	83.4	174.0	180.0	902.0
Beryllium	ug/L	<.20	.76	.38	<.20	<.20	<.20	.85	6.50
Boron	ug/L	530	1120	1250	999	1080	916	854	391
Cadmium	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Calcium	ug/L	33800	5790	5510	8700	4790	6350	7600	34500
Chloride	mg/L	73.3	280.0	335.0	267.0	354.0	415.0	221.0	46.3
Chromium	ug/L	<10.0	16.3	13.3	<10.0	<10.0	<10.0	24.2	122.0
Cobalt	ug/L	<1.0	4.9	3.9	<1.0	<1.0	<1.0	6.0	59.2
Fluoride	mg/L	1.40	4.00	3.50	2.60	3.90	3.10	2.80	.81
Lead	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	86.7
Lithium	ug/L	<20.0	41.8	34.4	<20.0	26.7	27.1	39.3	171.0
Mercury	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Molybdenum	ug/L	12.8	<10.0	<10.0	<10.0	<10.0	<10.0	13.8	12.7
pH	SU	7.78	8.28	8.67	7.31	7.41	8.44	8.28	8.04
Selenium	ug/L	<1	<1	<1	<1	<1	<1	<1	<10
Sulfate	mg/L	46.7	2.7	1.1	1.7	13.7	4.6	15.8	5.7
Thallium	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Total dissolved solids	mg/L	652	1500	1430	1220	1540	1540	1260	960

* - The displayed value is the arithmetic mean of multiple database matches.

Table 5

Analytical Data Summary for 11/14/2016

Constituents	Units	SWW-40	SWW-41	SWW-42	SWW-43	SWW-44	SWW-45	SWW-46	SWW-47
Antimony	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	1.2	5.2	<1.0
Arsenic	ug/L	1.8	2.5	1.6	1.9	2.1	5.8	7.9	16.8
Barium	ug/L	66.0	119.0	196.0	87.2	74.4	162.0	118.0	621.0
Beryllium	ug/L	<.20	.36	.36	<.20	<.20	<.20	.32	3.90
Boron	ug/L	667	985	1160	879	1030	853	759	355
Cadmium	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Calcium	ug/L	6320	4840	5020	7490	4740	6110	6770	35000
Chloride	mg/L	118.0	268.0	306.0	281.0	379.0	449.0	220.0	46.2
Chromium	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	89.2
Cobalt	ug/L	<1.0	2.4	3.2	<1.0	<1.0	<1.0	2.2	52.1
Fluoride	mg/L	1.50	1.60	1.40	1.10	1.20	1.00	2.80	.53
Lead	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	59.5
Lithium	ug/L	<20.0	31.0	28.3	<20.0	22.0	25.7	24.6	126.0
Mercury	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Molybdenum	ug/L	18.0	<10.0	<10.0	<10.0	11.9	<10.0	15.6	<10.0
pH	SU	8.64	8.56	8.50	8.34	8.43	8.62	8.41	8.34
Selenium	ug/L	<1	<1	<1	<1	<1	<1	<1	<5
Sulfate	mg/L	43.00	2.50	.85	2.00	15.50	4.40	15.70	4.10
Thallium	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Total dissolved solids	mg/L	881	1500	1430	1240	1600	1580	1120	780

* - The displayed value is the arithmetic mean of multiple database matches.

Table 6

Analytical Data Summary for 1/11/2017

Constituents	Units	SWW-40	SWW-41	SWW-42	SWW-43	SWW-44	SWW-45	SWW-46	SWW-47
Antimony	ug/L	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	4.0	<1.0
Arsenic	ug/L	1.9	2.5	7.2	1.8	3.0	5.8	7.6	4.2
Barium	ug/L	61.7	96.3	382.0	95.7	89.1	164.0	114.0	237.0
Beryllium	ug/L	<.20	<.20	1.20	<.20	<.20	<.20	.21	.92
Boron	ug/L	266	1020	1200	908	994	905	792	358
Cadmium	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Calcium	ug/L	5010	4320	17200	7760	4770	5970	5800	15200
Chloride	mg/L	131.0	262.0	295.0	295.0	355.0	474.0	250.0	48.4
Chromium	ug/L	<10.0	<10.0	39.2	<10.0	<10.0	<10.0	<10.0	20.3
Cobalt	ug/L	<1.0	<1.0	14.4	<1.0	<1.0	<1.0	1.3	9.8
Fluoride	mg/L	2.90	4.10	3.70	2.90	4.10	3.60	3.10	.83
Lead	ug/L	<10.0	<10.0	16.1	<10.0	<10.0	<10.0	<10.0	11.6
Lithium	ug/L	<20.0	27.0	58.0	<20.0	24.4	27.0	26.0	47.5
Mercury	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Molybdenum	ug/L	17.6	<10.0	<10.0	<10.0	<10.0	<10.0	12.7	10.4
pH	SU	8.63	8.46	8.89	8.41	8.67	8.48	8.42	8.52
Selenium	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	37.60	2.10	.92	2.00	10.30	1.40	11.60	3.00
Thallium	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Total dissolved solids	mg/L	960	1450	730	1300	1570	1700	1210	818

* - The displayed value is the arithmetic mean of multiple database matches.

Table 7

Analytical Data Summary for 3/14/2017

Constituents	Units	SWW-40	SWW-41	SWW-42	SWW-43	SWW-44	SWW-45	SWW-46	SWW-47
Antimony	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.5	<1.0
Arsenic	ug/L	2.3	5.8	<1.0	1.8	2.2	5.2	7.0	4.8
Barium	ug/L	84.0	157.0	134.0	86.0	77.5	146.0	235.0	304.0
Beryllium	ug/L	.36	1.00	<.20	<.20	<.20	<.20	1.40	1.70
Boron	ug/L	786	1040	1150	937	991	903	809	387
Cadmium	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Calcium	ug/L	5450	6890	3020	6660	3630	4890	7760	18100
Chloride	mg/L	164	270	308	318	377	469	271	59
Chromium	ug/L	<10.0	27.5	<10.0	<10.0	<10.0	<10.0	44.5	39.1
Cobalt	ug/L	2.4	9.3	<1.0	<1.0	<1.0	<1.0	10.9	17.2
Fluoride	mg/L	2.90	4.40	3.80	3.00	4.50	4.10	3.10	.79
Lead	ug/L	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	20.4
Lithium	ug/L	23.9	45.5	<20.0	<20.0	23.4	26.3	52.4	63.2
Mercury	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Molybdenum	ug/L	15.3	<10.0	<10.0	<10.0	<10.0	<10.0	10.1	<10.0
pH	SU	8.17	8.53	8.15	8.40	8.28	8.71	8.52	8.05
Selenium	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	34.4	2.1	1.0	1.7	8.2	3.3	10.2	3.7
Thallium	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Total dissolved solids	mg/L	1060	1450	1400	1250	1620	1660	1300	844

* - The displayed value is the arithmetic mean of multiple database matches.

Table 8

Analytical Data Summary for 5/09/2017 to 5/10/2017

Constituents	Units	SWW-40	SWW-41	SWW-42	SWW-43	SWW-44	SWW-45	SWW-46	SWW-47
Antimony	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	2.3	1.9	<1.0
Arsenic	ug/L	1.6	2.4	5.0	1.5	2.2	5.0	6.4	9.2
Barium	ug/L	67.5	96.2	338.0	88.2	80.8	140.0	124.0	427.0
Beryllium	ug/L	<.20	<.20	1.40	<.20	<.20	<.20	.25	2.30
Boron	ug/L	680	1010	1110	892	1030	962	741	392
Cadmium	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Calcium	ug/L	5060	3830	10900	6030	3410	4810	5530	24600
Chloride	mg/L	163	274	299	301	373	393	281	63
Chromium	ug/L	<10.0	<10.0	32.6	<10.0	<10.0	<10.0	<10.0	52.8
Cobalt	ug/L	<1.0	1.2	12.9	<1.0	<1.0	<1.0	1.7	30.8
Fluoride	mg/L	3.20	4.70	3.90	3.30	4.80	3.90	3.40	.92
Lead	ug/L	<10.0	<10.0	11.7	<10.0	<10.0	<10.0	<10.0	31.7
Lithium	ug/L	<20.0	29.6	56.8	<20.0	24.8	28.3	27.1	86.3
Mercury	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Molybdenum	ug/L	13.2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
pH	SU	8.53	8.46	8.70	8.29	8.56	8.58	8.30	8.22
Selenium	ug/L	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	<1.0	<5.0
Sulfate	mg/L	31.8	2.0	1.9	1.3	6.4	6.2	8.6	9.3
Thallium	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Total dissolved solids	mg/L	1010	1460	1420	1270	1580	1500	1290	928

* - The displayed value is the arithmetic mean of multiple database matches.

Table 9

Analytical Data Summary for 7/05/2017 to 7/06/2017

Constituents	Units	SWW-40	SWW-41	SWW-42	SWW-43	SWW-44	SWW-45	SWW-46	SWW-47
Antimony	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	2.1	4.8	<1.0
Arsenic	ug/L	1.7	2.2	6.2	1.7	2.1	4.9	7.3	5.9
Barium	ug/L	71.5	87.9	353.0	87.7	83.1	119.0	123.0	317.0
Beryllium	ug/L	<.20	<.20	1.40	<.20	<.20	<.20	.26	1.60
Boron	ug/L	773	1030	1120	851	977	860	771	422
Cadmium	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Calcium	ug/L	4280	3580	11800	6010	3640	3700	5840	18500
Chloride	mg/L	176.0	259.0	291.0	301.0	361.0	420.0	294.0	68.5
Chromium	ug/L	<10.0	<10.0	38.1	<10.0	<10.0	<10.0	10.1	34.0
Cobalt	ug/L	<1.0	<1.0	13.9	<1.0	<1.0	<1.0	1.6	17.0
Fluoride	mg/L	1.70	1.90	1.70	1.50	1.80	2.90	1.50	.58
Lead	ug/L	<10.0	<10.0	11.1	<10.0	<10.0	<10.0	<10.0	19.7
Lithium	ug/L	<20.0	27.6	66.8	<20.0	24.9	31.1	29.1	64.5
Mercury	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Molybdenum	ug/L	10.6	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
pH	SU	8.51	8.58	8.99	8.64	8.54	8.55	8.42	8.27
Selenium	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Sulfate	mg/L	25.2	1.6	2.3	1.8	5.0	5.4	6.7	6.8
Thallium	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Total dissolved solids	mg/L	1080	1440	1510	1310	1600	1570	1320	888

* - The displayed value is the arithmetic mean of multiple database matches.

Table 10

Analytical Data Summary for 8/18/2017

Constituents	Units	SWW-40	SWW-41	SWW-42	SWW-43	SWW-44	SWW-45	SWW-46	SWW-47
Antimony	ug/L								
Arsenic	ug/L								
Barium	ug/L								
Beryllium	ug/L								
Boron	ug/L								
Cadmium	ug/L								
Calcium	ug/L								
Chloride	mg/L								
Chromium	ug/L								
Cobalt	ug/L								
Fluoride	mg/L								
Lead	ug/L								
Lithium	ug/L								
Mercury	ug/L								
Molybdenum	ug/L								
pH	SU								
Selenium	ug/L								
Sulfate	mg/L								
Thallium	ug/L								
Total dissolved solids	mg/L								886

* - The displayed value is the arithmetic mean of multiple database matches.

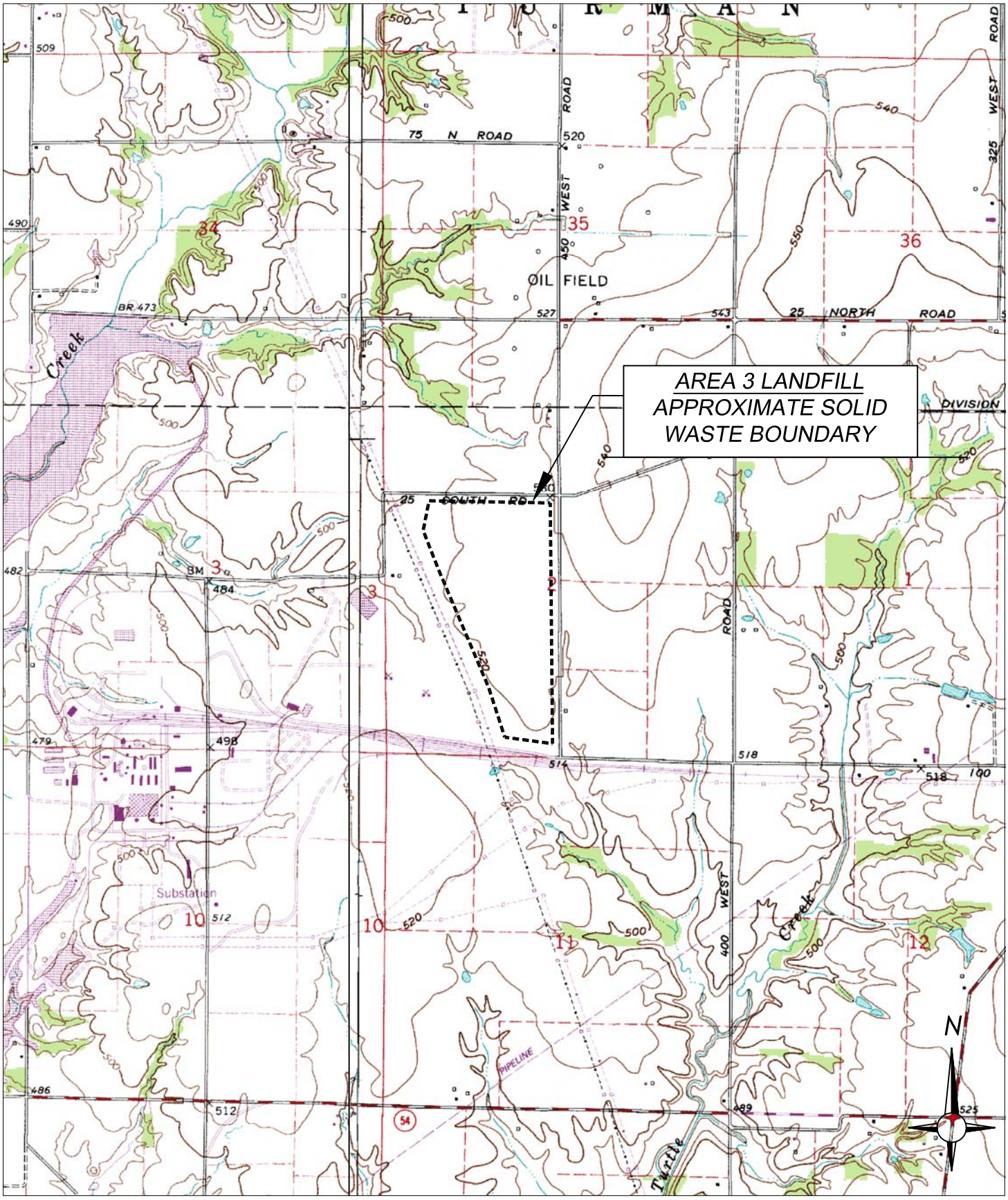
Table 11

Analytical Data Summary for 9/05/2017 to 9/06/2017

Constituents	Units	SWW-40	SWW-41	SWW-42	SWW-43	SWW-44	SWW-45	SWW-46	SWW-47
Antimony	ug/L	<1.0	<1.0	<1.0	<1.0	<1.0	1.7	2.2	<1.0
Arsenic	ug/L	1.7	2.0	<5.0	<5.0	<5.0	5.2	6.7	<5.0
Barium	ug/L	81.0	84.0	168.0	97.4	79.4	125.0	107.0	224.0
Beryllium	ug/L	<.20	<.20	.32	<.20	<.20	<.20	<.20	.78
Boron	ug/L	858	1070	1150	970	1020	905	831	462
Cadmium	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Calcium	ug/L	3700	3500	4310	6250	3070	3780	4890	12200
Chloride	mg/L	186.0	264.0	289.0	308.0	383.0	454.0	301.0	89.3
Chromium	ug/L	<10.0	<10.0	10.1	<10.0	<10.0	<10.0	<10.0	18.9
Cobalt	ug/L	<1	<1	<5	<1	<5	<1	<5	9
Fluoride	mg/L	3.8	4.8	3.7	3.6	5.0	4.3	3.8	1.2
Lead	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
Lithium	ug/L	20.5	24.3	28.5	<20.0	25.3	25.6	24.2	39.6
Mercury	ug/L	<2	<2	<2	<2	<2	<2	<2	<2
Molybdenum	ug/L	<10	<10	<10	<10	<10	<10	<10	<10
pH	SU	8.42	8.38	8.52	7.88	8.56	8.53	8.43	8.14
Selenium	ug/L	<1	<1	<5	<5	<5	<1	<5	<5
Sulfate	mg/L	21.8	1.5	2.5	2.4	3.3	3.6	6.6	6.2
Thallium	ug/L	<1	<1	<1	<1	<1	<1	<1	<1
Total dissolved solids	mg/L	1150	1460	1410	1340	1600	1660	1380	915

* - The displayed value is the arithmetic mean of multiple database matches.

FIGURES



VICINITY MAP

HOOSIER ENERGY
MEROM GENERATING STATION
AREA 3 LANDFILL
SULLIVAN COUNTY, INDIANA

Project Number: 170LF00147		Drn. By: PL
Drawing File: SEE LOWER LEFT		Ckd. By: MB
Date: 8/17	Scale: 1" = 2000'	App'd By:
ATC		Figure: 1

H:\2018\HOOSIER ENERGY\MEROM\170LF00147\170LF00147-VIC.DWG, VIC

H:\2018\HOOSIER ENERGY\MEROM\170LF00147\170LF00147-SITE.DWG, 11X17 300SC

SWW-45

SOLID WASTE BOUNDARY

CELL 1

SWW-44

SWW-46

SWW-43

AREA 3

SOLID WASTE BOUNDARY

SWW-42

SWW-47

SWW-41

SWW-40

SOLID WASTE BOUNDARY

N

300 0 100 200 300 400

SCALE: 1" = 400'

LEGEND:

EXISTING CCR BEDROCK MONITORING WELL

SWW-40 MONITORING WELL IDENTIFICATION

APPROXIMATE SOLID WASTE BOUNDARY

APPROXIMATE FACILITY BOUNDARY

POWER TRANSMISSION LINES

Figure: 2

Date: 1/18

Scale: AS SHOWN

SITE PLAN

HOOSIER ENERGY
MEROM GENERATING STATION
AREA 3 LANDFILL
SULLIVAN COUNTY, INDIANA

Project Number: 170LF00147	Drn. By: PL
Drawing File: SEE ABOVE	Ckd. By: MB
	App'd By:
ATC	Ckd. Date: