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2019 Annual Groundwater Monitoring and Corrective Action Report

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2019 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

MIAMI FORT BASIN A, MIAMI FORT POWER STATION



Bright ideas. Sustainable change.

**2019 ANNUAL GROUNDWATER MONITORING AND
CORRECTIVE ACTION REPORT
MIAMI FORT BASIN A, MIAMI FORT POWER STATION**

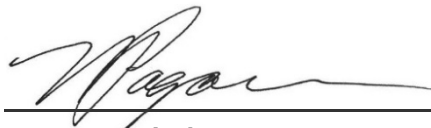
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ACRONYMS AND ABBREVIATIONS

CCR	Coal Combustion Residuals
CMA	Corrective Measures Assessment
GWPS	Groundwater Protection Standard
SAP	Sampling and Analysis Plan
SSL	Statistically Significant Level

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EXECUTIVE SUMMARY

This report has been prepared to provide the information required by Title 40 of the Code of Federal Regulations (40 C.F.R.) § 257.90(e) for the Miami Fort Basin A located at Miami Fort Power Station near North Bend, Ohio.

Groundwater is being monitored at Miami Fort Basin A in accordance with the Assessment Monitoring Program requirements specified in 40 C.F.R. § 257.95.

No changes were made to the monitoring system in 2019 (no wells were installed or decommissioned). Delineation monitoring wells MW-14, MW-15, and MW-16 were installed in May 2019 to delineate the extent of impacts for the Corrective Measures Assessment (CMA).

The following Statistically Significant Levels (SSLs) of 40 C.F.R. Part 257 Appendix IV parameters were determined during one or more sampling events in 2019:

- Cobalt at well MW-4; Molybdenum at well MW-6

As required by 40 C.F.R. § 257.95(g)(3)(i), a CMA (OBG, 2019) in accordance with 40 C.F.R. § 257.96 was initiated on May 8, 2019 and completed on September 5, 2019, and remedy selection is in progress.

A public meeting to discuss the results of the of the CMA was held in December 2019.

1. INTRODUCTION

This report has been prepared by Ramboll on behalf of Dynegy Miami Fort, LLC, to provide the information required by 40 C.F.R. § 257.90(e) for the Miami Fort Basin A located at Miami Fort Power Station near North Bend, Ohio.

In accordance with 40 C.F.R. § 257.90(e), the owner or operator of a Coal Combustion Residuals (CCR) unit must prepare an Annual Groundwater Monitoring and Corrective Action Report for the preceding calendar year that documents the status of the Groundwater Monitoring and Corrective Action Program for the CCR unit, summarizes key actions completed, describes any problems encountered, discusses actions to resolve the problems, and projects key activities for the upcoming year. At a minimum, the Annual Report must contain the following information, to the extent available:

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.
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.
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.
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 relative to background levels).
5. Other information required to be included in the Annual Report as specified in §§ 257.90 through 257.98.

This report provides the required information for the Miami Fort Basin A for calendar year 2019.

2. MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

SSLs were determined for Miami Fort Basin A and alternate source evaluations were inconclusive. In accordance with 40 C.F.R. § 257.95(g)(5), a CMA meeting the requirements of 40 C.F.R. § 257.96 was initiated on May 8, 2019 and completed on September 5, 2019. Remedy selection is in progress. Miami Fort Basin A remains in the Assessment Monitoring Program in accordance with 40 C.F.R. § 257.96(b).

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3. KEY ACTIONS COMPLETED IN 2019

The Assessment Monitoring Program is summarized in Table A. The groundwater monitoring system, including the CCR unit and all background and downgradient monitoring wells, is presented in Figure 1. In general, one groundwater sample was collected from each background and downgradient well during each monitoring event. Delineation monitoring wells MW-14, MW-15, and MW-16 were installed in May 2019. The monitoring system and the delineation wells were sampled June 2019 in accordance with the Sampling and Analysis Plan (SAP) (AECOM, 2017) to delineate the extent of impacts. Well 4A was sampled in August in accordance with the SAP to complete delineation. All samples were collected and analyzed in accordance with the SAP (AECOM, 2017). All monitoring data obtained under 40 C.F.R. §§ 257.90 through 257.98 (as applicable) in 2019 are presented in Tables 1 and 2. Analytical data were evaluated in accordance with the Statistical Analysis Plan (NRT/OBG, 2017) to determine any SSLs of Appendix IV parameters over Groundwater Protection Standards (GWPSs). Notifications were completed in accordance with 40 C.F.R. § 257.95(g).

Statistical background values are provided in Table 3 and GWPSs in Table 4.

Analytical results for the May and September 2018 sampling events were provided in the 2018 Annual Groundwater Monitoring and Corrective Action Report.

Alternate source evaluations were inconclusive for one or more of the SSLs. Consequently, and in accordance with 40 C.F.R. § 257.95(g)(5), a CMA meeting the requirements of 40 C.F.R. § 257.96 was initiated on May 8, 2019 and the required notification completed. The CMA (OBG, 2019) was completed on September 5, 2019 and posted to the publicly accessible website, as required by 40 C.F.R. § 257.107(h)(8). The demonstration justifying the need for a 60-day extension to the 90-day completion deadline for the CMA required by 40 C.F.R. § 257.96(a) is provided in Appendix A.

A public meeting was held on December 16, 2019 at the Miami Township Community Center in North Bend, Ohio to discuss the results of the of the CMA in accordance with 40 C.F.R. § 257.96(e).

Table A – 2018-2019 Assessment Monitoring Program Summary

Sampling Dates	Analytical Data Receipt Date	Parameters Collected	SSL(s)	SSL(s) Determination Date	CMA Initiated
May 7, 2018	July 9, 2018	Appendix III Appendix IV	NA	NA	NA
September 18-20, 2018	October 8, 2018	Appendix III Appendix IV Detected ¹	Cobalt (MW-4) Molybdenum (MW-6)	January 7, 2019	May 8, 2019
March 12-13, 2019	April 29, 2019	Appendix III Appendix IV	Cobalt (MW-4) Molybdenum (MW-6)	July 29, 2019	NA
September 9 & 19, 2019	October 8, 2019	Appendix III Appendix IV Detected ¹	TBD	TBD	NA

Notes:

NA: Not Applicable

TBD: To Be Determined

1. Groundwater sample analysis was limited to Appendix IV parameters detected in previous events in accordance with 40 C.F.R. § 257.95(d)(1).

4. PROBLEMS ENCOUNTERED AND ACTIONS TO RESOLVE THE PROBLEMS

No problems were encountered with the Groundwater Monitoring Program during 2019. Groundwater samples were collected and analyzed in accordance with the SAP (AECOM, 2017), and all data were accepted.

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5. KEY ACTIVITIES PLANNED FOR 2020

The following key activities are planned for 2020:

- Continuation of the Assessment Monitoring Program with semi-annual sampling scheduled for the first and third quarters of 2020.
- Remedy selection will continue; semiannual progress reports required by 40 C.F.R. § 257.97(a) will be completed and posted to the publicly accessible website as required by 40 C.F.R. § 257.107(h)(9).

Miami Fort

6. REFERENCES

AECOM, 2017, Sampling and Analysis Plan, CCR Rule Groundwater Monitoring, Basin A, Unit 111, Miami Fort Power Station, Cleves, Ohio, Job Number 60442412, Revision 0, October 17, 2017.

Natural Resource Technology, an OBG Company (NRT/OBG), 2017, Statistical Analysis Plan, Miami Fort Power Station, Dynegy Miami Fort, LLC, October 17, 2017.

OBG, Part of Ramboll, 2019. Corrective Measures Assessment, Miami Fort Basin A, Miami Fort Power Station, 11021 Brower Road, North Bend, Ohio, Dynegy Miami Fort, LLC, September 5, 2019.

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TABLES

Miami Fort

TABLE 1.
2019 ANALYTICAL RESULTS - GROUNDWATER ELEVATION AND APPENDIX III PARAMETERS
2019 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

MIAMI FORT POWER STATION
UNIT ID 111 - MIAMI FORT BASIN A
NORTH BEND, OHIO
ASSESSMENT MONITORING PROGRAM

Well Identification Number	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Date & Time Sampled	Depth to Groundwater (ft) ¹	Groundwater Elevation (ft NAVD88)	40 C.F.R. Part 257 Appendix III						
						Boron, total (mg/L)	Calcium, total (mg/L)	Chloride, total (mg/L)	Fluoride, total (mg/L)	pH (field) (S.U.)	Sulfate, total (mg/L)	Total Dissolved Solids (mg/L)
						6020A ²	6020A ²	9251 ²	9214 ²	SM 4500 H+B ²	9036 ²	SM 2540C ²
Background / Upgradient Monitoring Wells												
MW-1	39.114504	-84.810237	3/13/2019 11:50	43.28	461.21	0.797	182	37.4	<1.00	7.2	450	1010
			6/12/2019 12:00 ³	47.92	456.57	NA	154	17.6	NA	7.2	284	779
			9/9/2019 14:05 ⁴	50.29	454.20	0.700	164	23.3	<1.00	6.8	407	895
MW-7	39.115334	-84.808157	3/13/2019 12:35	49.14	461.03	0.0828	108	4.29	<1.00	7.2	50.4	449
			6/14/2019 6:45 ³	54.48	455.69	NA	110	5.09	NA	6.9	43.6	476
			9/9/2019 13:00 ⁴	56.74	453.43	0.267	112	5.02	<1.00	6.8	46.9	470
Downgradient Monitoring Wells												
MW-4	39.110470	-84.809339	3/12/2019 18:45	16.79	461.10	0.267	145	28.7	<1.00	6.5	355	738
			6/13/2019 13:30 ³	21.78	456.11	NA	183	25.9	NA	6.23	523	1010
			9/10/2019 9:45 ⁴	23.82	454.07	0.582	350	<15	<5.00	5.5	1450	2250
MW-5	39.111590	-84.807411	3/12/2019 15:25	48.64	461.32	4.08	171	939	<1.00	7.5	233	781
			6/14/2019 8:45 ³	53.68	456.28	NA	432	521	NA	7.0	735	2240
			9/10/2019 11:35 ⁴	55.74	454.22	19.5	370	510	<5.00	6.8	566	2670
MW-6	39.113183	-84.808005	3/12/2019 16:25	46.66	461.68	4.10	40.6	135	1.21	7.6	20.5	534
			6/14/2019 7:45 ³	51.73	456.61	NA	44.5	119	NA	7.3	14.2	557
			9/10/2019 12:10 ⁴	53.91	454.43	1.46	46.7	166	1.03	7.1	6.44	572
MW-12	39.111091	-84.810348	3/13/2019 10:40	47.81	460.63	6.48	197	166	<1.00	6.3	460	1030
			6/12/2019 12:52 ³	52.58	455.86	NA	209	193	NA	6.0	502	1220
			9/10/2019 8:45 ⁴	54.82	453.62	7.80	167	174	<1.00	5.5	<5.00	1110
MW-13	39.110920	-84.807436	3/12/2019 17:25	19.33	461.89	0.157	43.4	30.6	<1.00	8.0	51.2	261
			6/13/2019 15:05 ³	24.48	456.74	NA	46.6	29.6	NA	7.6	56.3	268
			9/10/2019 10:35 ⁴	26.52	454.70	0.211	45.1	30.3	<1.00	7.1	64.5	242
Delineation Monitoring Wells												
MW-14	39.110353	-84.809363	6/13/2019 14:15 ³	23.66	456.23	NA	39.7	28.4	NA	8.0	41.9	245
			9/10/2019 11:55 ⁴	25.74	454.15	0.161	40.7	29.7	<1.00	7.9	39.8	195
MW-15	39.113058	-84.806674	6/12/2019 10:50 ³	40.72	456.80	NA	114	189	NA	7.3	14.5	653
			9/10/2019 8:30 ⁴	42.89	454.63	0.453	103	191	<1.00	7.0	13.6	688
MW-16	39.113030	-84.806664	6/12/2019 9:42 ³	40.56	456.73	NA	200	118	NA	6.9	220	1010
			9/10/2019 7:50 ⁴	42.68	454.61	0.119	170	55.8	<1.00	6.7	118	1010
Prod-4A	39.112492	-84.806351	8/8/2019 9:35 ⁵	NA	NA	NA	NA	NA	NA	NA	NA	NA

[O: RAB 12/23/19, C: KLT 12/26/19]

Notes:

40 C.F.R. = Title 40 of the Code of Federal Regulations

ft = foot/feet

mg/L = milligrams per liter

NA = Not Analyzed

NAVD88 = North American Vertical Datum of 1988

NS = Not Sampled

S.U. = Standard Units

< = concentration is less than the concentration shown, which corresponds to the reporting limit for the method; estimated concentrations below the reporting limit and associated qualifiers are not provided since not utilized in statistics to determine Statistically Significant Increases (SSIs) over background.

¹All depths to groundwater were measured on the first day of the sampling event.

²4-digit numbers represent SW-846 analytical methods.

³Only SSL parameters were analyzed during this sampling event to delineate the extent of impact.

⁴Only the parameters detected during the previous sampling events were analyzed during this sampling event, in accordance with 40 C.F.R. § 257.95(d)(1).

⁵Only cobalt was analyzed during this sampling event to delineate the extent of impact.

TABLE 2.
2019 ANALYTICAL RESULTS - APPENDIX IV PARAMETERS
2019 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
MIAMI FORT POWER STATION
UNIT ID 111 - MIAMI FORT BASIN A
NORTH BEND, OHIO
ASSESSMENT MONITORING PROGRAM

Well Identification Number	Latitude (Decimal Degrees)	Longitude (Decimal Degrees)	Date & Time Sampled	40 C.F.R. Part 257 Appendix IV															
				Antimony, total (mg/L)	Arsenic, total (mg/L)	Barium, total (mg/L)	Beryllium, total (mg/L)	Cadmium, total (mg/L)	Chromium, total (mg/L)	Cobalt, total (mg/L)	Fluoride, total (mg/L)	Lead, total (mg/L)	Lithium, total (mg/L)	Mercury, total (mg/L)	Molybdenum, total (mg/L)	Radium 226/228, Combined (pCi/L)	Selenium, total (mg/L)	Thallium, total (mg/L)	
Background / Upgradient Monitoring Wells				6020A ¹	6020A ¹	6020A ¹	6020A ¹	6020A ¹	6020A ¹	6020A ¹	6020A ¹	6020A ¹	6020A ¹	6020A ¹	7470A ¹	6020A ¹	903/904 ¹	6020A ¹	6020A ¹
MW-1	39.114504	-84.810237	3/13/2019 11:50	<0.00200	<0.00100	0.0512	<0.00100	<0.00100	<0.00200	<0.000500	<1.00	<0.00100	0.0304	<0.000200	0.0308	0.514	<0.00500	<0.00100	
			6/12/2019 12:00 ²	NA	NA	NA	NA	NA	NA	<0.000500	NA	NA	NA	NA	0.0241	NA	NA	NA	
			9/9/2019 14:05 ³	NA	<0.00100	0.0482	<0.00100	<0.00100	0.00289	<0.000500	<1.00	<0.00100	0.0228	<0.000200	0.0210	0.0553	<0.00500	<0.00100	
MW-7	39.115334	-84.808157	3/13/2019 12:35	<0.00200	<0.00100	0.0942	<0.00100	<0.00100	0.00218	<0.000500	<1.00	<0.00100	<0.00500	<0.000200	<0.00500	0.337	<0.00500	<0.00100	
			6/14/2019 6:45 ²	NA	NA	NA	NA	NA	NA	<0.000500	NA	NA	NA	NA	<0.00500	NA	NA	NA	
			9/9/2019 13:00 ³	NA	<0.00100	0.107	<0.00100	<0.00100	0.00313	<0.000500	<1.00	<0.00100	0.00524	<0.000200	<0.00500	0.464	<0.00500	<0.00100	
Downgradient Monitoring Wells																			
MW-4	39.110470	-84.809339	3/12/2019 18:45	<0.00200	0.00205	0.0118	<0.00100	<0.00100	0.00313	0.00588	<1.00	0.00131	0.00596	<0.000200	<0.00500	0.369	<0.00500	<0.00100	
			6/13/2019 13:30 ²	NA	NA	NA	NA	NA	0.00827	0.0171	<5.00	<0.00100	0.00680	<0.000200	<0.00500	0.382	<0.00500	<0.00100	
			9/10/2019 9:45 ³	NA	<0.00100	0.0197	<0.00100	0.00102	0.00296	0.00171	<5.00	<0.00100	0.00680	<0.000200	<0.00500	0.382	<0.00500	<0.00100	
MW-5	39.111590	-84.807411	3/12/2019 15:25	<0.00200	<0.00100	0.0734	<0.00100	<0.00100	0.00274	<0.000500	<1.00	<0.00100	0.00674	<0.000200	0.00761	0.195	<0.00500	<0.00100	
			6/14/2019 8:45 ²	NA	NA	NA	NA	NA	0.000661	NA	NA	NA	NA	NA	NA	NA	NA	NA	
			9/10/2019 11:35 ³	NA	<0.00100	0.120	<0.00100	<0.00100	0.00264	0.000522	<5.00	<0.00100	<0.050	<0.000200	0.00543	0.000	<0.00500	<0.00100	
MW-6	39.113183	-84.808005	3/12/2019 16:25	<0.00200	0.00946	0.357	<0.00100	<0.00100	0.00272	0.00258	1.21	<0.00100	0.00925	<0.000200	0.370	0.532	<0.00500	<0.00100	
			6/14/2019 7:45 ²	NA	NA	NA	NA	NA	0.00330	NA	NA	NA	NA	NA	NA	NA	NA	NA	
			9/10/2019 12:10 ³	NA	0.0104	0.787	<0.00100	<0.00100	0.00261	0.00296	1.03	<0.00100	0.00936	<0.000200	0.289	0.846	<0.00500	<0.00100	
MW-12	39.111091	-84.810348	3/13/2019 10:40	<0.00200	<0.00100	0.0198	<0.00100	0.00106	0.00227	0.00194	<1.00	<0.00100	0.00642	0.000248	<0.00500	0.360	<0.00500	<0.00100	
			6/12/2019 12:52 ²	NA	NA	NA	NA	NA	0.00227	NA	NA	NA	NA	NA	<0.00500	NA	NA	NA	
			9/10/2019 8:45 ³	NA	<0.00100	0.0162	<0.00100	0.00179	0.00337	0.00256	<1.00	<0.00100	0.00706	0.00100	<0.00500	0.0927	<0.00500	<0.00100	
MW-13	39.110920	-84.807436	3/12/2019 17:25	<0.00200	0.0107	0.161	<0.00100	<0.00100	0.00261	<0.000500	<1.00	<0.00100	0.00647	<0.000200	0.0113	0.415	<0.00500	<0.00100	
			6/13/2019 15:05 ²	NA	NA	NA	NA	NA	NA	<0.000500	NA	NA	NA	NA	0.0123	NA	NA	NA	
			9/10/2019 10:35 ³	NA	0.019	0.206	<0.00100	<0.00100	0.00301	<0.000500	<1.00	<0.00100	0.00674	<0.000200	0.0126	0.373	<0.00500	<0.00100	
Delineation Monitoring Wells																			
MW-14	39.110353	-84.809363	6/13/2019 14:15 ²	NA	NA	NA	NA	NA	0.000986	NA	NA	NA	NA	0.00896	NA	NA	NA	NA	
			9/10/2019 11:55 ³	NA	0.00154	0.0430	<0.00100	<0.00100	0.00326	0.000685	<1.00	<0.00100	0.00526	<0.000200	0.00712	0.330	<0.00500	<0.00100	
MW-15	39.113058	-84.806674	6/12/2019 10:50 ²	NA	NA	NA	NA	NA	0.00652	NA	NA	NA	NA	0.0206	NA	NA	NA	NA	
			9/10/2019 8:30 ³	NA	0.00373	0.0815	<0.00100	<0.00100	0.00302	0.00360	<1.00	<0.00100	0.00799	<0.000200	0.0269	0.589	<0.00500	<0.00100	
MW-16	39.113030	-84.806664	6/12/2019 9:42 ²	NA	NA	NA	NA	NA	0.00957	NA	NA	NA	NA	<0.00500	NA	NA	NA	NA	
			9/10/2019 7:50 ³	NA	<0.00100	0.0901	<0.00100	<0.00100	0.00287	0.00267	<1.00	<0.00100	0.0110	<0.000200	<0.00500	0.0761	<0.00500	<0.00100	
Prod-4A	39.112492	-84.806351	8/8/2019 9:35 ⁴	NA	NA	NA	NA	NA	0.00200	NA	NA	NA	NA	NA	NA	NA	NA	NA	

[O: RAB 12/23/19, C: KLT 12/26/19]

Notes:

40 C.F.R. = Title 40 of the Code of Federal Regulations

mg/L = milligrams per liter

NA = Not Analyzed

NS = Not Sampled

pCi/L = picoCuries per liter

< = concentration is less than concentration shown, which corresponds to the reporting limit for the method; estimated concentrations below the reporting limit and associated qualifiers are not provided since not utilized in statistics to determine

Statistically Significant Levels (SSLs) over Groundwater Protection Standards.

¹4-digit numbers represent SW-846 analytical methods and 3-digit numbers represent Clean Water Act analytical methods.

²Only SSL parameters were analyzed during this sampling event to delineate the extent of impact.

³Only the parameters detected during the previous sampling events were analyzed during this sampling event, in accordance with 40 C.F.R. § 257.95(d)(1).

⁴Only cobalt was analyzed during this sampling event to delineate the extent of impact.

TABLE 3.
STATISTICAL BACKGROUND VALUES
2019 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 MIAMI FORT POWER STATION
 UNIT ID 111 - MIAMI FORT BASIN A
 NORTH BEND, OHIO
 ASSESSMENT MONITORING PROGRAM

Parameter	Statistical Background Value (UPL)
40 C.F.R. Part 257 Appendix III	
Boron (mg/L)	1.90
Calcium (mg/L)	267
Chloride (mg/L)	71.5
Fluoride (mg/L)	0.373
pH (S.U.)	6.5 / 7.5
Sulfate (mg/L)	550
Total Dissolved Solids (mg/L)	1160

[O: RAB 12/23/19, C: KLT 12/26/19]

Notes:

40 C.F.R. = Title 40 of the Code of Federal Regulations
 mg/L = milligrams per liter
 S.U. = Standard Units
 UPL = Upper Prediction Limit

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TABLE 4.
GROUNDWATER PROTECTION STANDARDS
2019 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
 MIAMI FORT POWER STATION
 UNIT ID 111 - MIAMI FORT BASIN A
 NORTH BEND, OHIO
 ASSESSMENT MONITORING PROGRAM

Parameter	Groundwater Protection Standard ¹
40 C.F.R. Part 257 Appendix IV	
Antimony (mg/L)	0.006
Arsenic (mg/L)	0.010
Barium (mg/L)	2
Beryllium (mg/L)	0.004
Cadmium (mg/L)	0.005
Chromium (mg/L)	0.10
Cobalt (mg/L)	0.006
Fluoride (mg/L)	4
Lead (mg/L)	0.015
Lithium (mg/L)	0.071
Mercury (mg/L)	0.002
Molybdenum (mg/L)	0.10
Radium 226+228 (pCi/L)	5
Selenium (mg/L)	0.05
Thallium (mg/L)	0.002

[O: RAB 12/23/19, C: KLT 12/26/19]

Notes:

40 C.F.R. = Title 40 of the Code of Federal Regulations

mg/L = milligrams per liter

pCi/L = picoCuries per liter

¹Groundwater Protection Standard is the higher of the Maximum Contaminant Level / Health-Based Level or background.

Miami Fort

FIGURES

Miami Fort

PROJECT: 169000XXXX | DATED: 1/29/2020 | DESIGNER: STOLZSD
Y:\Mapping\Projects\222286\MXD\2019_AnnualGWM_CAR\Figure 1_GWS_WellLoc_MiamiFort_BasinA.mxd



- CCR DELINEATION MONITORING WELL LOCATION
- DOWNGRADIENT MONITORING WELL LOCATION
- UPGRADIENT MONITORING WELL LOCATION
- WATER LEVEL ONLY MONITORING WELL LOCATION
- MIAMI FORT PRODUCTION WELLS
- CCR MONITORED UNIT



MONITORING WELL LOCATION MAP MIAMI FORT BASIN A UNIT ID:111

2019 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT
VISTRA CCR RULE GROUNDWATER MONITORING
MIAMI FORT POWER STATION
NORTH BEND, OHIO

FIGURE 1

O'BRIEN & GERE ENGINEERS, INC.
A RAMBOLL COMPANY



APPENDIX A
CORRECTIVE MEASURES ASSESSMENT EXTENSION DEMONSTRATION

Miami Fort

July 8, 2019

Brian Voelker
Vistra Energy
133 South 4th Street
Suite 306
Springfield, IL 62701

RE: Justification for Extension to Complete Corrective Measures Assessment Under 40 C.F.R. § 257.96
Miami Fort Power Station Basin A – CCR Unit ID 111

Dear **Brian**,

O'Brien & Gere Engineers, Inc., a Ramboll Company, (OBG, Part of Ramboll) is providing Dynegy Miami Fort, LLC with this letter certifying that, based on our knowledge of the status of the groundwater monitoring and corrective measures assessment (CMA) activities at the Basin A coal combustion residuals (CCR) unit at Miami Fort Power Station, a 60-day extension to complete the CMA is justified and valid.

OBG, Part of Ramboll understands the CMA was initiated on April 8, 2019, following identification of a groundwater protection standard exceedance under 40 C.F.R. § 257.95. CMA activities are ongoing, and due to site-specific circumstances, the CMA cannot be completed within 90 days. Accordingly, 60 additional days are warranted based on the following site-specific circumstances:

- Installation of additional groundwater monitoring wells and additional groundwater sampling and analysis to characterize the contaminant plume, as required by 40 C.F.R. § 257.95(g)(1), including the following:
 - » Work plan development to identify locations, depths, and screen intervals for additional monitoring wells
 - » Mobilization to the site to install, develop, and sample the additional monitoring wells
 - » Laboratory analysis of groundwater samples collected from the new monitoring wells
 - » Comparison of laboratory results to the groundwater protection standards

As used herein, the word "certification" or "certifying" shall mean an expression of the Engineer's professional opinion to the best of his or her information, knowledge, and belief, and does not constitute a warranty or guarantee by the Engineer.



PROFESSIONAL CERTIFICATION

I hereby certify that a 60-day extension to the 90-day completion timeframe for the corrective measures assessment is justified and valid pursuant to 40 C.F.R. § 257.96(a).

Very truly yours,
O'BRIEN & GERE ENGINEERS, INC., A RAMBOLL COMPANY



Richard H. Weber, PE
Vice President

Miami Fort Basin A CMA Extension.docx



Miami Fort