

# 2017 Annual Groundwater Monitoring and Corrective Action Report

Newton Primary Ash Pond – CCR Unit ID 501  
Newton Power Station  
6725 North 500<sup>th</sup> Street  
Newton, Illinois 62448

**Illinois Power Generating Company**

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# 2017 Annual Groundwater Monitoring and Corrective Action Report

Newton Primary Ash Pond – CCR Unit ID 501  
Newton Power Station  
Newton, Illinois

Prepared for:  
*Illinois Power Generating Company*



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## ACRONYMS AND ABBREVIATIONS

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CCR	Coal Combustion Residuals
CFR	Code of Federal Regulations
mg/L	milligrams per liter
NRT/OBG	Natural Resource Technology, an OBG Company
OBG	O'Brien & Gere Engineers, Inc.
SSI	statistically significant increase
STD	standard units

## 1 INTRODUCTION

### 1.1 OVERVIEW

This report has been prepared on behalf of Illinois Power Generating Company by O'Brien & Gere Engineers, Inc. (OBG), to provide the information required by 40 CFR 257.90(e) for the Newton Primary Ash Pond located at Newton Power Station near Newton, Illinois.

In accordance with 40 CFR 257.90(e), the owner or operator of an existing 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 over background levels).
5. Other information required to be included in the annual report as specified in §§ 257.90 through 257.98.<sup>1</sup>

This report provides the required information for the Newton Primary Ash Pond for calendar year 2017.

### 1.2 MONITORING AND CORRECTIVE ACTION PROGRAM STATUS

The final three independent samples of the minimum eight required by 40 CFR 257.94(b) were collected and analyzed from each background and downgradient well in 2017 before October 17. The other five independent samples were collected and analyzed in 2015 and 2016.

The first semi-annual monitoring sample for the Detection Monitoring Program was collected in November 2017 from each well.

Using the last of the minimum eight samples required to be collected by October 17, 2017 to determine whether a statistically significant increase (SSI) of Appendix III parameters over background concentrations has occurred, evaluation of analytical data from the downgradient wells was initiated beginning no later than October 17, 2017 for the initial eight samples. SSI determinations will be completed within 90 days (January 15, 2018). In addition, SSI determinations will be completed within 90 days of completion of analysis for the first semi-annual detection monitoring sample collected on November 17-18, 2017, for which analytical data was received on December 5, 2017.

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<sup>1</sup> For calendar year 2017, corrective action and other information required to be included in the annual report as specified in §§ 257.90 through 257.98 is inapplicable.

## 2 KEY ACTIONS COMPLETED IN 2017

### 2.1 SUMMARY

Three groundwater sampling events were completed in 2017 as part of an effort initiated in 2015 to collect eight independent samples from background and downgradient monitoring wells in accordance with 40 CFR 257.94(b).

Subsequent to collection of the eight independent samples, an additional sampling event was completed in November 2017 for parameters listed in Appendix III, 40 CFR Part 257, to supplement the background data set and as the first semi-annual monitoring sampling event for the Detection Monitoring Program.

A map showing the groundwater monitoring system, including the CCR unit and all background and downgradient monitoring wells with well identification numbers, for the Newton Primary Ash Pond is presented in Figure 1. No monitoring wells were installed or decommissioned from the monitoring system in 2017.

Samples were collected and analyzed in accordance with the Sampling and Analysis Plan (NRT/OBG, 2017a) prepared for the Newton Primary Ash Pond.

All monitoring data obtained under 40 CFR §§ 257.90 through 257.98 (as applicable) in 2017, as well as monitoring data for the previously collected five independent samples are presented in Tables 1 and 2. Sample collection dates in 2017 were January 23-26, April 24-25, June 13, and November 17-18. Sample collection dates for previously collected five independent samples are identified in Tables 1 and 2. One ground water sample was collected from each background and downgradient well in each sampling event.

Statistical evaluation of analytical data from the eight independent samples required to be collected by October 17, 2017 and the first semi-annual detection monitoring event on November 17-18, 2017 was initiated and will be completed within 90 days of October 17, 2017 (January 15, 2018) or 90 days from receipt of the data from the first semi-annual detection monitoring event (March 5, 2018), respectively. Statistical evaluation of analytical data is being performed in accordance with the Statistical Analysis Plan, Newton Power Station, Illinois Power Generating Company (NRT/OBG, 2017b).

### 2.2 PROBLEMS ENCOUNTERED AND ACTIONS TO RESOLVE THE PROBLEM

No problems were encountered with the groundwater monitoring program during 2017. Groundwater samples were collected and analyzed in accordance with the Sampling and Analysis Plan, and all data was accepted.

### 3 KEY ACTIVITIES PLANNED FOR 2018

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#### 3.1 SUMMARY

The following key activities are planned for 2018:

- Continuation of the Detection Monitoring Program with semi-annual sampling scheduled for the 2nd and 4th quarters of 2018.
- Complete evaluation of analytical data from the downgradient wells, using both the eight samples required to be collected by October 17, 2017 and the first semi-annual detection monitoring sample taken in November 2017 to determine whether a SSI of Appendix III parameters over background concentrations has occurred.
- If an SSI is identified, potential alternate sources (*i.e.*, a source other than the CCR unit caused the SSI or that that SSI resulted from error in sampling, analysis, statistical evaluation, or natural variation in groundwater quality) will be evaluated. If an alternate source is demonstrated to be the cause of the SSI, a written demonstration will be completed within 90 days of SSI detection and included in the annual groundwater monitoring and corrective action report for 2018.
  - » If an alternate source(s) is not identified to be the cause of the SSI, the applicable requirements of 40 CFR §§ 257.94 through 257.98 (*e.g.*, assessment monitoring) as may apply in 2018 will be met, including associated recordkeeping/notifications required by 40 CFR §§ 257.105 through 257.108.

## REFERENCES

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Natural Resource Technology, an OBG Company, 2017a, Sampling and Analysis Plan, Newton Primary Ash Pond, Newton Power Station, Newton, Illinois, Project No. 2285, Revision 0, October 17, 2017.

Natural Resource Technology, an OBG Company, 2017b, Statistical Analysis Plan, Coffeen Power Station, Newton Power Station, Illinois Power Generating Company, October 17, 2017.





Tables

Newton

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Table 1. Newton Primary Ash Pond: Appendix III Analytical Results

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Location ID	Sample Date	B, tot, mg/L	Ca, tot, mg/L	Cl, tot, mg/L	F, tot, mg/L	pH (field), STD	SO4, tot, mg/L
APW10	12/16/2015	0.06600	120.0	46.00	0.3280	7.090	430.0
	1/20/2016	0.07700	120.0	48.00	<0.2500	7.180	410.0
	5/3/2016	0.06500	140.0	46.00	0.4480	7.090	410.0
	8/2/2016	0.06300	140.0	45.00	0.3670	7.100	410.0
	10/26/2016	0.06900	120.0	48.00	0.3710	7.120	470.0
	1/25/2017	0.06500	160.0	46.00	0.2580	7.050	430.0
	4/25/2017	0.05600	120.0	44.00	0.2890	7.010	410.0
	6/13/2017	0.07700	110.0	46.00	0.3440	6.850	410.0
	11/18/2017	0.07200	120.0	47.00	0.4140	6.930	390.0
APW5	12/15/2015	0.09900	51.00	48.00	0.4860	7.500	15.00
	1/20/2016	0.1200	52.00	50.00	0.4090	7.530	15.00
	4/27/2016	0.1000	71.00	58.00	0.4940	7.700	14.00
	8/1/2016	0.1000	49.00	52.00	0.5400	7.470	1.800
	10/25/2016	0.1200	50.00	50.00	0.6600	7.640	<1.000
	1/23/2017	0.09000	45.00	50.00	0.4180	7.380	<1.000
	4/24/2017	0.07900	44.00	46.00	0.4370	6.980	1.200
	6/13/2017	0.08200	48.00	47.00	0.5080	7.070	<1.000
	11/17/2017	0.09900	51.00	43.00	0.6340	6.900	<1.000

**Table 1. Newton Primary Ash Pond: Appendix III Analytical Results**

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Location ID	Sample Date	TDS, mg/L
APW10	12/16/2015	1000.
	1/20/2016	950.0
	5/3/2016	930.0
	8/2/2016	840.0
	10/26/2016	960.0
	1/25/2017	1000.
	4/25/2017	1000.
	6/13/2017	920.0
	11/18/2017	910.0
APW5	12/15/2015	560.0
	1/20/2016	510.0
	4/27/2016	520.0
	8/1/2016	500.0
	10/25/2016	1000.
	1/23/2017	550.0
	4/24/2017	600.0
	6/13/2017	540.0
	11/17/2017	480.0

Newton

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Table 1. Newton Primary Ash Pond: Appendix III Analytical Results

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Location ID	Sample Date	B, tot, mg/L	Ca, tot, mg/L	Cl, tot, mg/L	F, tot, mg/L	pH (field), STD	SO4, tot, mg/L
APW6	12/15/2015	0.07300	53.00	26.00	0.5090	7.460	9.900
	1/20/2016	0.08200	53.00	24.00	0.3930	7.360	9.900
	4/27/2016	0.1600	64.00	29.00	0.5640	6.450	7.400
	8/1/2016	0.07800	50.00	27.00	0.6500	7.430	1.200
	10/25/2016	0.09300	50.00	26.00	0.6860	7.480	<1.000
	1/23/2017	0.07600	46.00	26.00	0.4480	6.930	<1.000
	4/24/2017	0.07400	43.00	50.00	0.4700	7.180	<1.000
	6/13/2017	0.09300	51.00	25.00	0.5670	7.120	2.300
	11/17/2017	0.09400	50.00	23.00	0.6170	7.240	1.900
APW7	12/15/2015	0.07300	74.00	69.00	0.4670	7.440	13.00
	1/21/2016	0.05200	74.00	79.00	0.3800	7.420	8.600
	5/3/2016	0.07100	85.00	72.00	0.5450	7.530	7.500
	8/1/2016	0.07000	86.00	77.00	0.4620	7.250	2.800
	10/26/2016	0.09600	76.00	79.00	0.4250	7.200	<1.000
	1/26/2017	0.08200	87.00	77.00	0.3520	7.180	<1.000
	4/24/2017	0.06900	87.00	77.00	0.3670	7.330	<1.000
	6/13/2017	0.08400	93.00	77.00	0.4250	7.240	<1.000
	11/17/2017	0.09700	72.00	73.00	0.5080	7.200	3.800

Table 1. Newton Primary Ash Pond: Appendix III Analytical Results

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Location ID	Sample Date	TDS, mg/L
APW6	12/15/2015	480.0
	1/20/2016	500.0
	4/27/2016	450.0
	8/1/2016	520.0
	10/25/2016	560.0
	1/23/2017	530.0
	4/24/2017	540.0
	6/13/2017	460.0
	11/17/2017	470.0
APW7	12/15/2015	520.0
	1/21/2016	440.0
	5/3/2016	500.0
	8/1/2016	490.0
	10/26/2016	590.0
	1/26/2017	520.0
	4/24/2017	600.0
	6/13/2017	560.0
	11/17/2017	530.0

**Table 1. Newton Primary Ash Pond: Appendix III Analytical Results**

Location ID	Sample Date	B, tot, mg/L	Ca, tot, mg/L	Cl, tot, mg/L	F, tot, mg/L	pH (field), STD	SO4, tot, mg/L
APW8	12/15/2015	0.08300	85.00	52.00	0.4410	7.400	35.00
	1/21/2016	0.06000	85.00	59.00	0.4140	7.480	34.00
	5/3/2016	0.08300	100.0	55.00	0.5660	7.350	30.00
	8/2/2016	0.07600	94.00	56.00	0.5040	7.230	35.00
	10/26/2016	0.09100	84.00	59.00	0.4630	7.370	37.00
	1/25/2017	0.08100	100.0	57.00	0.4040	7.220	36.00
	4/25/2017	0.07300	100.0	57.00	0.4180	7.460	38.00
	6/13/2017	0.09200	110.0	57.00	0.4490	7.310	38.00
	11/17/2017	0.1100	83.00	50.00	0.4740	7.120	39.00
APW9	12/15/2015	0.06200	54.00	88.00	0.5740	7.460	25.00
	1/20/2016	0.07400	57.00	95.00	0.4680	7.590	27.00
	5/3/2016	0.07000	70.00	110.0	0.7460	7.550	18.00
	8/2/2016	0.07300	74.00	130.0	0.5320	7.170	4.200
	10/26/2016	0.09000	77.00	130.0	0.5280	7.550	1.500
	1/25/2017	0.08100	79.00	130.0	0.4680	7.460	<1.000
	4/25/2017	0.07800	67.00	120.0	0.5150	7.540	1.100
	6/13/2017	0.05300	42.00	51.00	0.7550	7.540	48.00
	11/18/2017	0.08000	68.00	84.00	0.6550	7.430	4.500

**Table 1. Newton Primary Ash Pond: Appendix III Analytical Results**

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Location ID	Sample Date	TDS, mg/L
APW8	12/15/2015	560.0
	1/21/2016	510.0
	5/3/2016	560.0
	8/2/2016	520.0
	10/26/2016	600.0
	1/25/2017	600.0
	4/25/2017	590.0
	6/13/2017	600.0
	11/17/2017	490.0
APW9	12/15/2015	630.0
	1/20/2016	540.0
	5/3/2016	590.0
	8/2/2016	640.0
	10/26/2016	770.0
	1/25/2017	740.0
	4/25/2017	840.0
	6/13/2017	300.0
	11/18/2017	720.0

Table 2. Newton Primary Ash Pond: Appendix IV Analytical Results

Location ID	Sample Date	As, tot, mg/L	Ba, tot, mg/L	Be, tot, mg/L	Cd,tot, mg/L	Co, tot, mg/L	Cr, tot, mg/L
APW10	12/16/2015	0.003400	0.03800	<0.001000	<0.001000	<0.002000	<0.004000
	1/20/2016	0.004300	0.04200	<0.001000	<0.001000	<0.002000	<0.004000
	5/3/2016	0.008300	0.04000	<0.001000	<0.001000	<0.002000	<0.004000
	8/2/2016	0.009200	0.03700	<0.001000	<0.001000	<0.002000	<0.004000
	10/26/2016	0.009000	0.04000	<0.001000	<0.001000	<0.002000	<0.004000
	1/25/2017	0.01000	0.03500	<0.001000	<0.001000	<0.002000	<0.004000
	4/25/2017	0.008400	0.03100	<0.001000	<0.001000	<0.002000	<0.004000
	6/13/2017	0.003500	0.02700	<0.001000	<0.001000	<0.002000	<0.004000
APW5	12/15/2015	0.01800	0.1900	<0.001000	<0.001000	<0.002000	<0.004000
	1/20/2016	0.01700	0.1900	<0.001000	<0.001000	<0.002000	<0.004000
	4/27/2016	0.02100	0.2400	<0.001000	<0.001000	<0.002000	<0.004000
	8/1/2016	0.01400	0.2100	<0.001000	<0.001000	<0.002000	<0.004000
	10/25/2016	0.01300	0.2200	<0.001000	<0.001000	<0.002000	<0.004000
	1/23/2017	0.01500	0.2100	<0.001000	<0.001000	<0.002000	<0.004000
	4/24/2017	0.01400	0.2000	<0.001000	<0.001000	<0.002000	0.004000
	6/13/2017	0.01600	0.2300	<0.001000	<0.001000	<0.002000	<0.004000
APW6	12/15/2015	0.01700	0.1600	<0.001000	<0.001000	<0.002000	<0.004000
	1/20/2016	0.009100	0.1700	<0.001000	<0.001000	<0.002000	<0.004000



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Table 2. Newton Primary Ash Pond: Appendix IV Analytical Results

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Location ID	Sample Date	F, tot, mg/L	Hg, tot, mg/L	Li, tot, mg/L	Mo, tot, mg/L	Pb, tot, mg/L	Ra-226,228, tot, pCi/L
APW10	12/16/2015	0.3280	<0.0002000	0.03000	0.009400	<0.001000	0.7550
	1/20/2016	<0.2500	<0.0002000	0.02100	0.01100	<0.001000	1.160
	5/3/2016	0.4480	<0.0002000	0.02300	0.01000	<0.001000	0.7990
	8/2/2016	0.3670	<0.0002000	0.02600	0.009100	<0.001000	0.6000
	10/26/2016	0.3710	<0.0002000	0.02700	0.009300	<0.001000	0.5560
	1/25/2017	0.2580	<0.0002000	0.02300	0.008500	<0.001000	0.4300
	4/25/2017	0.2890	<0.0002000	0.02600	0.007100	<0.001000	0.6040
	6/13/2017	0.3440	<0.0002000	0.02600	0.009100	<0.001000	0.8970
APW5	12/15/2015	0.4860	<0.0002000	0.02300	0.02300	0.001700	0.3110
	1/20/2016	0.4090	0.0002000	0.01700	0.02300	0.001600	0.2350
	4/27/2016	0.4940	0.002000	0.02000	0.03200	0.001200	0.2810
	8/1/2016	0.5400	<0.0002000	0.01600	0.02700	<0.001000	0.6160
	10/25/2016	0.6600	<0.0002000	0.01500	0.02700	<0.001000	0.6540
	1/23/2017	0.4180	<0.0002000	0.01300	0.02100	<0.001000	0.09990
	4/24/2017	0.4370	<0.0002000	0.01500	0.01600	0.001400	1.190
	6/13/2017	0.5080	<0.0002000	0.01400	0.01800	<0.001000	1.320
APW6	12/15/2015	0.5090	0.0002300	0.01900	0.01200	<0.001000	0.5910
	1/20/2016	0.3930	<0.0002000	0.01200	0.01300	<0.001000	0.2360

Newton

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Table 2. Newton Primary Ash Pond: Appendix IV Analytical Results

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Location ID	Sample Date	Sb, tot, mg/L	Se, tot, mg/L	Tl, tot, mg/L
APW10	12/16/2015	<0.003000	<0.001000	<0.001000
	1/20/2016	<0.003000	<0.001000	<0.001000
	5/3/2016	<0.003000	<0.001000	<0.001000
	8/2/2016	<0.003000	<0.001000	<0.001000
	10/26/2016	<0.003000	<0.001000	<0.001000
	1/25/2017	<0.003000	<0.001000	<0.001000
	4/25/2017	<0.003000	<0.001000	<0.001000
	6/13/2017	<0.003000	<0.001000	<0.001000
APW5	12/15/2015	<0.003000	<0.001000	<0.001000
	1/20/2016	<0.003000	<0.001000	<0.001000
	4/27/2016	<0.003000	0.001000	<0.001000
	8/1/2016	<0.003000	<0.001000	<0.001000
	10/25/2016	<0.003000	<0.001000	<0.001000
	1/23/2017	<0.003000	<0.001000	<0.001000
	4/24/2017	<0.003000	<0.001000	<0.001000
	6/13/2017	<0.003000	<0.001000	<0.001000
APW6	12/15/2015	<0.003000	0.006000	<0.001000
	1/20/2016	<0.003000	<0.001000	<0.001000

Table 2. Newton Primary Ash Pond: Appendix IV Analytical Results

Location ID	Sample Date	As, tot, mg/L	Ba, tot, mg/L	Be, tot, mg/L	Cd,tot, mg/L	Co, tot, mg/L	Cr, tot, mg/L
APW6	4/27/2016	0.01900	0.2100	<0.001000	<0.001000	<0.002000	<0.004000
	8/1/2016	0.004500	0.2000	<0.001000	<0.001000	<0.002000	<0.004000
	10/25/2016	0.004100	0.2200	<0.001000	<0.001000	<0.002000	<0.004000
	1/23/2017	0.003600	0.2100	<0.001000	<0.001000	<0.002000	<0.004000
	4/24/2017	0.004200	0.2000	<0.001000	0.001200	<0.002000	<0.004000
	6/13/2017	0.005700	0.2200	0.002500	0.001700	0.002000	<0.004000
APW7	12/15/2015	0.003900	0.3500	<0.001000	<0.001000	<0.002000	<0.004000
	1/21/2016	0.006500	0.4000	<0.001000	<0.001000	<0.002000	<0.004000
	5/3/2016	0.004000	0.4100	<0.001000	<0.001000	<0.002000	<0.004000
	8/1/2016	0.004900	0.4500	<0.001000	<0.001000	<0.002000	<0.004000
	10/26/2016	0.005800	0.5000	<0.001000	<0.001000	<0.002000	<0.004000
	1/26/2017	0.006200	0.4500	<0.001000	<0.001000	<0.002000	<0.004000
	4/24/2017	0.007700	0.4500	<0.001000	<0.001000	<0.002000	0.004900
	6/13/2017	0.008700	0.4800	<0.001000	<0.001000	<0.002000	<0.004000
APW8	12/15/2015	0.008300	0.2400	<0.001000	<0.001000	<0.002000	<0.004000
	1/21/2016	0.01600	0.3000	<0.001000	<0.001000	<0.002000	0.004900
	5/3/2016	0.01200	0.3200	<0.001000	<0.001000	<0.002000	0.004500
	8/2/2016	0.01300	0.3200	<0.001000	<0.001000	<0.002000	<0.004000

Newton

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Table 2. Newton Primary Ash Pond: Appendix IV Analytical Results

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Location ID	Sample Date	F, tot, mg/L	Hg, tot, mg/L	Li, tot, mg/L	Mo, tot, mg/L	Pb, tot, mg/L	Ra-226,228, tot, pCi/L
APW6	4/27/2016	0.5640	<0.0002000	0.01900	0.02800	0.001200	0.9840
	8/1/2016	0.6500	<0.0002000	0.01600	0.006600	<0.001000	0.6900
	10/25/2016	0.6860	<0.0002000	0.01500	0.008700	<0.001000	0.3290
	1/23/2017	0.4480	<0.0002000	0.01400	0.008600	<0.001000	0.3160
	4/24/2017	0.4700	<0.0002000	0.01500	0.01100	0.001200	0.8590
	6/13/2017	0.5670	<0.0002000	0.01400	0.01400	0.002500	0.9320
APW7	12/15/2015	0.4670	<0.0002000	<0.01000	0.01400	<0.001000	1.160
	1/21/2016	0.3800	<0.0002000	<0.01000	0.008300	0.001500	1.060
	5/3/2016	0.5450	<0.0002000	<0.01000	0.008600	<0.001000	1.740
	8/1/2016	0.4620	<0.0002000	<0.01000	0.006000	<0.001000	1.320
	10/26/2016	0.4250	<0.0002000	<0.01000	0.005400	<0.001000	2.020
	1/26/2017	0.3520	<0.0002000	<0.01000	0.007200	<0.001000	1.820
	4/24/2017	0.3670	<0.0002000	<0.01000	0.002900	0.002200	1.260
	6/13/2017	0.4250	<0.0002000	<0.01000	0.003900	0.004600	1.690
APW8	12/15/2015	0.4410	<0.0002000	0.01300	0.007500	0.001600	1.950
	1/21/2016	0.4140	<0.0002000	0.01200	0.005500	0.002300	2.270
	5/3/2016	0.5660	<0.0002000	<0.01000	0.006300	0.002100	1.880
	8/2/2016	0.5040	<0.0002000	<0.01000	0.005400	<0.001000	0.8570

Newton

January 16, 2018

Table 2. Newton Primary Ash Pond: Appendix IV Analytical Results

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Location ID	Sample Date	Sb, tot, mg/L	Se, tot, mg/L	Tl, tot, mg/L
APW6	4/27/2016	<0.003000	<0.001000	<0.001000
	8/1/2016	<0.003000	<0.001000	<0.001000
	10/25/2016	<0.003000	<0.001000	<0.001000
	1/23/2017	<0.003000	<0.001000	<0.001000
	4/24/2017	<0.003000	<0.001000	0.001100
	6/13/2017	<0.003000	0.001400	0.002500
APW7	12/15/2015	<0.003000	<0.001000	<0.001000
	1/21/2016	<0.003000	<0.001000	<0.001000
	5/3/2016	<0.003000	<0.001000	<0.001000
	8/1/2016	<0.003000	<0.001000	<0.001000
	10/26/2016	<0.003000	<0.001000	<0.001000
	1/26/2017	<0.003000	<0.001000	<0.001000
	4/24/2017	<0.003000	<0.001000	<0.001000
	6/13/2017	<0.003000	<0.001000	<0.001000
APW8	12/15/2015	<0.003000	<0.001000	<0.001000
	1/21/2016	<0.003000	<0.001000	<0.001000
	5/3/2016	<0.003000	0.001600	<0.001000
	8/2/2016	<0.003000	<0.001000	<0.001000

Table 2. Newton Primary Ash Pond: Appendix IV Analytical Results

Location ID	Sample Date	As, tot, mg/L	Ba, tot, mg/L	Be, tot, mg/L	Cd,tot, mg/L	Co, tot, mg/L	Cr, tot, mg/L
APW8	10/26/2016	0.01300	0.3500	<0.001000	<0.001000	<0.002000	<0.004000
	1/25/2017	0.01700	0.3700	<0.001000	<0.001000	<0.002000	<0.004000
	4/25/2017	0.02000	0.3600	<0.001000	<0.001000	0.005600	0.01600
	6/13/2017	0.01700	0.3900	<0.001000	<0.001000	0.004300	0.01000
APW9	12/15/2015	0.007000	0.2400	<0.001000	<0.001000	<0.002000	<0.004000
	1/20/2016	0.006700	0.2400	<0.001000	<0.001000	<0.002000	<0.004000
	5/3/2016	0.008000	0.3200	<0.001000	<0.001000	<0.002000	<0.004000
	8/2/2016	0.01400	0.4100	<0.001000	<0.001000	<0.002000	<0.004000
	10/26/2016	0.01600	0.4700	<0.001000	<0.001000	<0.002000	<0.004000
	1/25/2017	0.01800	0.4400	<0.001000	<0.001000	<0.002000	<0.004000
	4/25/2017	0.01700	0.3800	<0.001000	<0.001000	<0.002000	<0.004000
	6/13/2017	0.003900	0.1100	<0.001000	<0.001000	<0.002000	<0.004000

Table 2. Newton Primary Ash Pond: Appendix IV Analytical Results

Location ID	Sample Date	F, tot, mg/L	Hg, tot, mg/L	Li, tot, mg/L	Mo, tot, mg/L	Pb, tot, mg/L	Ra-226,228, tot, pCi/L
APW8	10/26/2016	0.4630	<0.0002000	<0.01000	0.005500	<0.001000	0.8120
	1/25/2017	0.4040	<0.0002000	<0.01000	0.005700	<0.001000	0.4990
	4/25/2017	0.4180	<0.0002000	0.01700	0.007400	0.009700	1.800
	6/13/2017	0.4490	<0.0002000	0.01200	0.008100	0.007500	2.080
APW9	12/15/2015	0.5740	<0.0002000	<0.01000	0.02100	0.001100	0.6120
	1/20/2016	0.4680	<0.0002000	<0.01000	0.02300	0.004400	0.7430
	5/3/2016	0.7460	<0.0002000	<0.01000	0.02100	0.005100	1.540
	8/2/2016	0.5320	<0.0002000	<0.01000	0.01100	<0.001000	1.137
	10/26/2016	0.5280	<0.0002000	<0.01000	0.01000	<0.001000	1.180
	1/25/2017	0.4680	<0.0002000	<0.01000	0.007500	<0.001000	1.780
	4/25/2017	0.5150	0.0002300	<0.01000	0.005300	<0.001000	1.070
	6/13/2017	0.7550	<0.0002000	<0.01000	0.01600	<0.001000	0.9840

Table 2. Newton Primary Ash Pond: Appendix IV Analytical Results

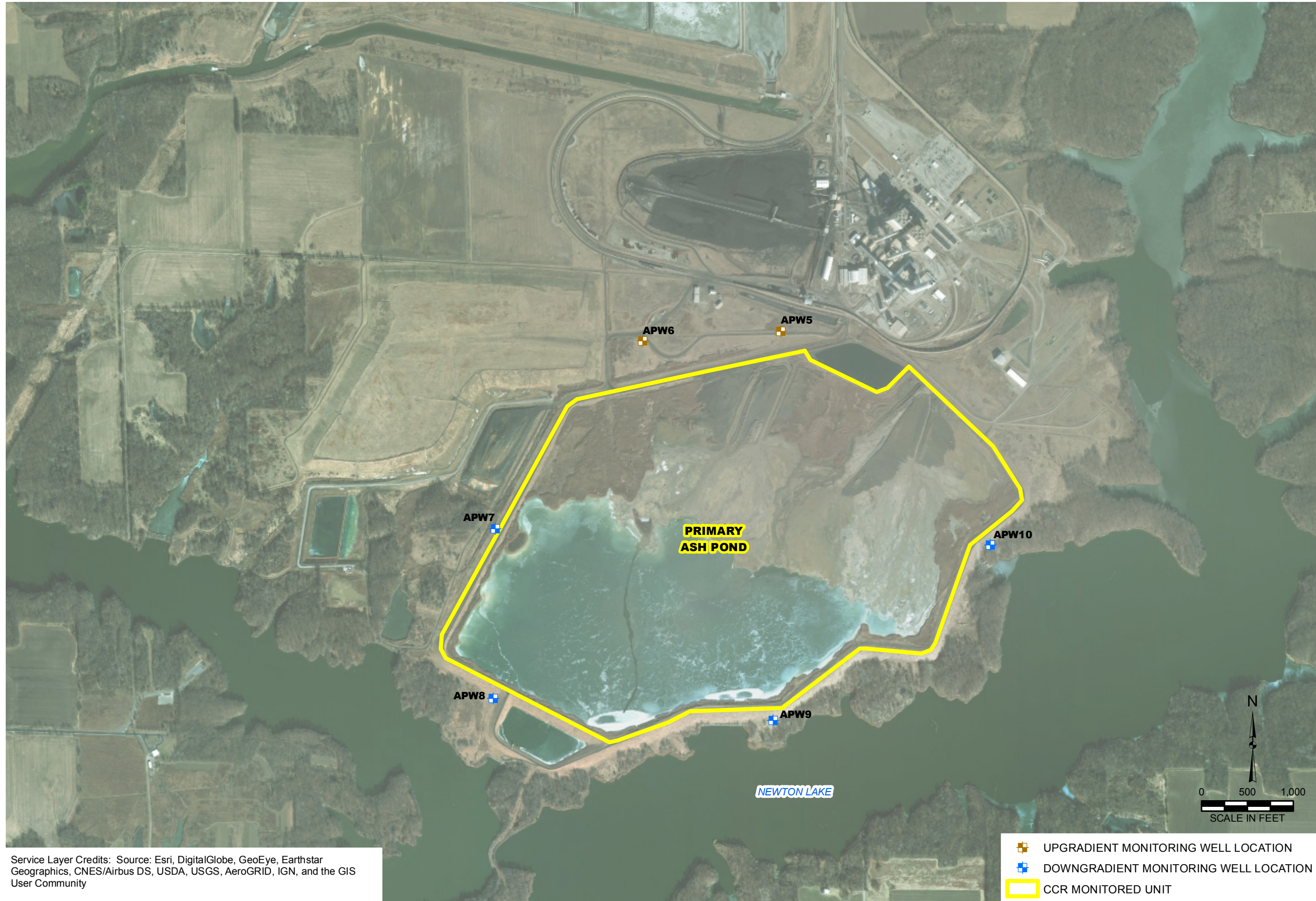
Location ID	Sample Date	Sb, tot, mg/L	Se, tot, mg/L	Tl, tot, mg/L
APW8	10/26/2016	<0.003000	<0.001000	<0.001000
	1/25/2017	<0.003000	<0.001000	<0.001000
	4/25/2017	<0.003000	<0.001000	<0.001000
	6/13/2017	<0.003000	<0.001000	<0.001000
APW9	12/15/2015	<0.003000	<0.001000	<0.001000
	1/20/2016	<0.003000	<0.001000	<0.001000
	5/3/2016	<0.003000	<0.001000	<0.001000
	8/2/2016	<0.003000	<0.001000	<0.001000
	10/26/2016	<0.003000	<0.001000	<0.001000
	1/25/2017	<0.003000	<0.001000	<0.001000
	4/25/2017	<0.003000	<0.001000	<0.001000
	6/13/2017	<0.003000	<0.001000	<0.001000








**Figures**

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-  UPGRADIENT MONITORING WELL LOCATION
-  DOWNGRADIENT MONITORING WELL LOCATION
-  CCR MONITORED UNIT

DRAWN BY/DATE:  
SDS 1/8/18  
REVIEWED BY/DATE:  
KLT 1/8/18  
APPROVED BY/DATE:  
SJC 1/25/18

GROUNDWATER SAMPLING WELL LOCATION MAP  
 NEWTON PRIMARY ASH POND  
 UNIT ID: 501  
 2017 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT  
 DYNEGY CCR RULE GROUNDWATER MONITORING  
 NEWTON POWER STATION  
 NEWTON, ILLINOIS

PROJECT NO: 67719

FIGURE NO: 1



**OBG**

THERE'S A WAY

