



2017 ANNUAL GROUNDWATER MONITORING REPORT AES PUERTO RICO LP, GUAYAMA, PUERTO RICO

This 2017 Annual Report was prepared 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 (Rule), specifically subsection §257.90(e)(1) through (5).

AES Puerto Rico LP (“AES-PR”) operates a 454 MW coal-fired power plant located in the municipality of Guayama in the south coast of Puerto Rico (“Site”). The Site has an approximate total area of 101 acres. AES-PR produces approximately 17% of the total electricity generated in Puerto Rico, which is supplied to the Puerto Rico Electric Power Authority (PREPA).

AES-PR is bordered to the north and west by an inactive pharmaceutical facility (formerly TAPI Puerto Rico) and by an undeveloped parcel of land, to the south by land owned by the Puerto Rico Ports Authority and Las Mareas Harbor, to the east by an inactive petroleum refinery (formerly Chevron Phillips Chemical Puerto Rico Core), and to the west by AES Ilumina (solar panel farm). See Figure 1.

The power plant uses bituminous coal for energy production, and generates coal combustion residuals (CCR) in the form of coal ash. The CCR is converted to a manufactured aggregate known as Agremax that is stored in a temporary Agremax stockpile storage area that is located near the southern property boundary.¹

This annual report addresses the Agremax Storage Area as described in the Groundwater Monitoring Program report, which was certified and placed in the facility’s operating record by October 17, 2017 as required by §257.105(h)(2) and posted on the facilities website by 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 italic type followed by a short narrative addressing how that specific requirement has been 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

¹ AES-PR has stated previously, that it does not admit the Agremax stockpile storage area is a CCR Landfill covered by the CCR Rule and expressly preserves all rights and defenses.

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 Agremax Storage Area 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): 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), a map showing the location of the Agremax Storage Area and associated upgradient and downgradient monitoring wells are included in this report as Figure 2.

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

To comply with the requirements of §257.91, a groundwater-monitoring network comprised of five wells was installed at the Site. The design, construction and installation of the monitoring wells are summarized in Table 1 and described and presented in the Groundwater Monitoring Program report. None of the wells used to monitor groundwater quality upgradient and downgradient of the Agremax Storage Area were decommissioned in 2017.

§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 by October 17, 2017. A summary of the groundwater-monitoring program for the Agremax Storage Area, including the analytical results for the Appendix III and Appendix IV list of constituents, is presented in Tables 2 and 3 of this report. All the samples obtained were required by the detection 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 activities conducted during calendar year 2017 at the Agremax Storage Area. 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. No transition between monitoring programs occurred in 2017. A narrative discussion of any transition between monitoring programs 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.

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.

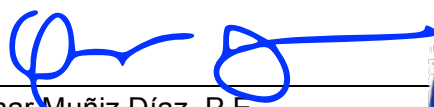
SIGNATURES AND CERTIFICATION

This report has been prepared by:



Alberto Meléndez
Principal, DNA-Environment, LLC

I hereby certify that the information contained in this 2017 Annual Report is accurate and meets the requirements in 40 CFR Part 257, Subpart D, Disposal of Coal Combustion Residuals from Electric Utilities, subsection §257.90(e)(1) through (5). I am a duly registered Professional Engineer under the laws of the Commonwealth of Puerto Rico.


Omar Muñoz Díaz, P.E.
P.E. License No. 6049



January 31, 2018

Date

TABLES

Table 1. Design, Construction and Installation of Monitoring Wells

Well ID	Well Placement	Coordinates ¹		TOC ² Elevation (ft)	Screen Interval (ft bgs ³)	Well Diameter/ Screen Slot Size	Rationale for Placement
		Northing	Easting				
MW-1	Upgradient	212731.35	230013.63	22.90	12.9 – 22.9	2-in PVC/ 0.010-in	Located to the north of the Agremax Storage Area to obtain representative samples of background groundwater in the uppermost aquifer not impacted by potential migration from the Agremax stockpile.
MW-2	Upgradient	212639.32	230127.80	23.10	9.9 – 19.9	2-in PVC/ 0.010-in	Located to the northeast of the Agremax Storage Area to monitor the quality of groundwater, in the uppermost aquifer, migrating towards the Agremax Storage Area and potentially impacted by existing contamination from the Chevron Phillips Chemical Puerto Rico Core facility, adjoining property to the east.
MW-3	Downgradient	212188.69	229867.35	16.04	13.8 – 23.8	2-in PVC/ 0.010-in	Located to the south-southwest of the Agremax Storage Area and stormwater control system. This well was installed in the uppermost aquifer to detect potential impacts to the quality of groundwater passing the downgradient boundary of the Agremax Storage Area and stormwater control system, in the south-southwest direction.
MW-4	Downgradient	212186.07	229968.59	17.85	15 – 25	2-in PVC/ 0.010-in	Located to the south of the Agremax Storage Area and contiguous stormwater concrete ditch. This well was installed in the uppermost aquifer to detect potential impacts to the quality of groundwater passing the downgradient boundary of the Agremax Storage Area, southward.
MW-5	Downgradient	212202.55	230090.65	16.47	13.4 – 23.4	2-in PVC/ 0.010-in	Located to the south-southeast of the Agremax Storage Area and contiguous stormwater concrete ditch. This well was installed in the uppermost aquifer to detect potential impacts to the quality of groundwater passing the downgradient boundary of the Agremax Storage Area, in the south-southeast direction.

Notes: ¹ Puerto Rico State Plane Coordinate System, NAD 83, Lambert Projection (meters)² TOC – Top of Casing³ bgs – below ground surface

**Table 2. Analytical Results of Groundwater Samples Analyzed for Constituents in Appendix III of CCR Rule
AES Puerto Rico, LP in Guayama, Puerto Rico**

MW ID	Sampling Event	Sample ID	Sampling Date	Constituents (mg/L), pH (SU)						
				Boron	Calcium	Chloride	Fluoride MCL = 4.0	pH	Sulfate	TDS
MW-1	1	AES-MW1-080817	8/8/17	0.26	140	240	0.47	6.87	340	1100
MW-2	1	AES-MW2-080817	8/8/17	0.16	88	37	0.36	6.53	7.7	460
MW-3	1	AES-MW3-080817	8/8/17	0.78	290	2900	2.0	6.74	630	6000
MW-4	1	AES-MW4-080817	8/8/17	3.4	590	9800	0.63	6.91	15000	41000
MW-4	1	AES-MW4-DUP-080817	8/8/17	3.4	620	9900	0.61	--	15000	41000
MW-5	1	AES-MW5-080917	8/9/17	0.37	850	3800	0.42	6.52	2500	8200
MW-1	2	AES-MW1-081517	8/15/17	0.26	150	260	0.53	7.07	410	1400
MW-2	2	AES-MW2-081517	8/15/17	0.17	88	37	0.40	6.83	7.1	470
MW-3	2	AES-MW3-081517	8/15/17	0.85	320	3400	2.1	7.10	1300	7600
MW-4	2	AES-MW4-081617	8/16/17	3.7	620	11000	0.63	7.08	16000	43000
MW-4	2	AES-MW4-DUP-081617	8/16/17	4.1	630	10000	0.61	--	16000	43000
MW-5	2	AES-MW5-081617	8/16/17	0.46	890	3800	0.45	6.61	2700	7900
MW-1	3	AES-MW1-082217	8/22/17	0.25	150	220	0.55	6.74	400	1400
MW-2	3	AES-MW2-082217	8/22/17	0.16	89	37	0.4	6.54	10	450
MW-3	3	AES-MW3-082217	8/22/17	0.83	340	3600	2.2	6.78	1500	8600
MW-4	3	AES-MW4-082317	8/23/17	3.8	620	9800	0.65	7.09	15000	42000
MW-4	3	AES-MW4-DUP-082317	8/23/17	3.7	590	9900	0.65	--	15000	42000
MW-5	3	AES-MW5-082217	8/22/17	0.39	800	3700	0.46	6.49	2500	11000
MW-1	4	AES-MW1-082917	8/29/17	0.25	160	240	0.58	6.92	390	1400
MW-2	4	AES-MW2-082917	8/29/17	0.17	100	37	0.42	6.68	16	470
MW-3	4	AES-MW3-082917	8/29/17	0.90	390	3700	2.3	7.01	1700	8300
MW-4	4	AES-MW4-083017	8/30/17	3.6	670	11000	0.68	7.14	16000	42000
MW-4	4	AES-MW4-DUP-083017	8/30/17	3.6	670	11000	0.66	--	16000	41000
MW-5	4	AES-MW5-082917	8/29/17	0.39	930	3700	0.48	6.79	2600	9800
MW-1	5	AES-MW1-091217	9/12/17	0.26	160	220	0.47	6.90	410	1400
MW-2	5	AES-MW2-091217	9/12/17	0.17	94	36	0.35	6.65	9.8	480
MW-3	5	AES-MW3-091217	9/12/17	0.90	370	3900	1.9	7.03	2300	9900
MW-4	5	AES-MW4-091317	9/13/17	3.2	600	10000	0.53	7.12	17000	42000
MW-4	5	AES-MW4-DUP-091317	9/13/17	3.4	610	10000	0.63	--	17000	43000
MW-5	5	AES-MW5-091217	9/12/17	0.37	830	3400	0.29	6.76	2600	9700
MW-1	6	AES-MW1-100317	10/3/17	0.26	160	220	0.61	7.05	390	1500
MW-2	6	AES-MW2-100317	10/3/17	0.17	92	36	0.43	6.81	14	490
MW-3	6	AES-MW3-100317	10/3/17	1.2	390	5600	1.8	7.52	4400	15000
MW-4	6	AES-MW4-100417	10/4/17	3.5	620	10000	0.64	7.27	15000	41000
MW-4	6	AES-MW4-DUP-100317	10/4/17	3.9	640	10000	0.63	--	15000	41000
MW-5	6	AES-MW5-100317	10/3/17	0.39	790	3600	0.52	6.91	2200	9000
MW-1	7	AES-MW1-101117	10/11/17	0.27	170	260	0.58	7.32	390	1500
MW-2	7	AES-MW2-101117	10/11/17	0.16	99	41	0.41	6.88	15	510
MW-3	7	AES-MW3-101117	10/11/17	1.2	420	5300	1.9	7.34	3000	9900
MW-4	7	AES-MW4-101217	10/12/17	3.4	610	11000	0.67	7.37	14000	40000
MW-4	7	AES-MW4-DUP-101217	10/12/17	3.5	590	11000	0.65	--	14000	40000
MW-5	7	AES-MW5-101117	10/11/17	0.44	840	3700	0.49	7.02	2100	11000
MW-1	8	AES-MW1-101717	10/17/17	0.26	150	270	0.55	7.15	410	1600
MW-2	8	AES-MW2-101717	10/17/17	0.17	99	45	0.36	6.86	28	560
MW-3	8	AES-MW3-101717	10/17/17	1.2	380	4500	1.8	7.45	2600	13000
MW-4	8	AES-MW4-101717	10/17/17	3.1	580	11000	0.65	7.39	14000	41000
MW-4	8	AES-MW4-DUP-101717	10/17/17	3.3	580	12000	0.64	--	15000	41000
MW-5	8	AES-MW5-101717	10/17/17	0.42	750	3500	0.47	6.86	2000	9500

Notes:

Sampling Date format is month/day/year

mg/L - milligrams per Liter. All concentrations are in mg/L, except for pH values.

SU - pH Standard Units

MCL - Maximum Contaminant Level. Fluoride is the only constituent in Appendix III with an MCL.

TDS - Total Dissolved Solids

Sample ID format is: "Site Name" followed by the "Monitoring_Well_ID"; followed by the "Sampling_Date" in mmddyy format.

Sample ID with 'DUP' designation indicates a duplicate sample. For example, AES-MW4-DUP-080817 is the duplicate of sample AES-MW4-080817.

pH - Field reading taken inside low-flow cell. pH reading of duplicate sample was not technically possible as flow cell was bypassed for sample collection per EPA low-flow procedure.

**Table 3. Analytical Results of Groundwater Samples Analyzed for Constituents in Appendix IV of CCR Rule
AES Puerto Rico, LP in Guayama, Puerto Rico**

MW ID	Sampling Event	Sample ID	Sampling Date	Constituents (mg/L)							
				Antimony MCL = 0.006	Arsenic MCL = 0.010	Barium MCL = 2	Beryllium MCL = 0.004	Cadmium MCL = 0.005	Chromium MCL = 0.1	Cobalt	Fluoride MCL = 4.0
MW-1	1	AES-MW1-080817	8/8/17	0.0010 U	0.00046 U	0.050	0.00034 U	0.00034 U	0.0011 U	0.00058 J	0.47
MW-2	1	AES-MW2-080817	8/8/17	0.0010 U	0.00046 U	0.10	0.00034 U	0.00034 U	0.0011 U	0.00040 U	0.36
MW-3	1	AES-MW3-080817	8/8/17	0.0010 U	0.0038	0.33	0.00034 U	0.00034 U	0.0011 U	0.0018 J	2.0
MW-4	1	AES-MW4-080817	8/8/17	0.0010 U	0.0036	0.057	0.00034 U	0.00036 J	0.0011 U	0.0018 J	0.63
MW-4	1	AES-MW4-DUP-080817	8/8/17	0.0014 J	0.0031	0.057	0.00034 U	0.00034 U	0.0011 U	0.0017 J	0.61
MW-5	1	AES-MW5-080917	8/9/17	0.0010 U	0.0032	0.041	0.00034 U	0.00034 U	0.0011 U	0.0034	0.42
MW-1	2	AES-MW1-081517	8/15/17	0.0010 U	0.00055 J	0.056	0.00034 U	0.00034 U	0.0011 U	0.00055 J	0.53
MW-2	2	AES-MW2-081517	8/15/17	0.0010 U	0.00047 J	0.11	0.00034 U	0.00034 U	0.0011 U	0.00040 U	0.40
MW-3	2	AES-MW3-081517	8/15/17	0.0010 U	0.0034	0.29	0.00034 U	0.00034 U	0.0011 U	0.0019	2.1
MW-4	2	AES-MW4-081617	8/16/17	0.0010 U	0.0037	0.060	0.00034 U	0.00034 U	0.0011 U	0.0017	0.63
MW-4	2	AES-MW4-DUP-081617	8/16/17	0.0010 U	0.0033	0.060	0.00034 U	0.00034 U	0.0011 U	0.0016	0.61
MW-5	2	AES-MW5-081617	8/16/17	0.0010 U	0.0024	0.043	0.00034 U	0.00034 U	0.0011 U	0.0035	0.45
MW-1	3	AES-MW1-082217	8/22/17	0.0010 U	0.00046 U	0.058	0.00034 U	0.00034 U	0.0011 U	0.00068 J	0.55
MW-2	3	AES-MW2-082217	8/22/17	0.0010 U	0.00046 U	0.11	0.00034 U	0.00034 U	0.0011 U	0.00040 U	0.40
MW-3	3	AES-MW3-082217	8/22/17	0.0010 U	0.0021	0.37	0.00034 U	0.00034 U	0.0011 U	0.0023 J	2.2
MW-4	3	AES-MW4-082317	8/23/17	0.0010 U	0.0026	0.057	0.00034 U	0.00034 U	0.0011 U	0.0017 J	0.65
MW-4	3	AES-MW4-DUP-082317	8/23/17	0.0010 U	0.0025	0.058	0.00034 U	0.00034 U	0.0011 U	0.0017 J	0.65
MW-5	3	AES-MW5-082217	8/22/17	0.0010 U	0.0018	0.039	0.00034 U	0.00034 U	0.0011 U	0.0036	0.46
MW-1	4	AES-MW1-082917	8/29/17	0.0010 U	0.00046 U	0.055	0.00034 U	0.00034 U	0.0011 U	0.00062 J	0.58
MW-2	4	AES-MW2-082917	8/29/17	0.0010 U	0.00046 U	0.11	0.00034 U	0.00034 U	0.0011 U	0.00040 U	0.42
MW-3	4	AES-MW3-082917	8/29/17	0.0010 U	0.0024	0.25	0.00034 U	0.00034 U	0.0011 U	0.0022 J	2.30
MW-4	4	AES-MW4-083017	8/30/17	0.0010 U	0.0027	0.055	0.00034 U	0.00034 U	0.0011 U	0.0017 J	0.68
MW-4	4	AES-MW4-DUP-083017	8/30/17	0.0010 U	0.0024	0.054	0.00034 U	0.00034 U	0.0011 U	0.0016 J	0.66
MW-5	4	AES-MW5-082917	8/29/17	0.0010 U	0.0021	0.036	0.00034 U	0.00034 U	0.0011 U	0.0033	0.48
MW-1	5	AES-MW1-091217	9/12/17	0.0010 U	0.00046 J	0.057	0.00034 U	0.00034 U	0.0011 U	0.00075 J	0.47
MW-2	5	AES-MW2-091217	9/12/17	0.0010 U	0.00046 U	0.11	0.00034 U	0.00034 U	0.0011 U	0.00040 U	0.35
MW-3	5	AES-MW3-091217	9/12/17	0.0012 J	0.0029	0.23	0.00034 U	0.00034 U	0.0011 U	0.0025	1.9
MW-4	5	AES-MW4-091317	9/13/17	0.0010 U	0.0035	0.056	0.00034 U	0.00034 U	0.0011 U	0.0017	0.53
MW-4	5	AES-MW4-DUP-091317	9/13/17	0.0010 U	0.0038	0.056	0.00034 U	0.00034 U	0.0011 U	0.0017	0.63
MW-5	5	AES-MW5-091217	9/12/17	0.0010 U	0.0041	0.0038	0.00034 U	0.00034 U	0.0011 U	0.0033	0.29
MW-1	6	AES-MW1-100317	10/3/17	0.0010 U	0.00087 J	0.056	0.00034 U	0.00034 U	0.0011 U	0.00087 J	0.61
MW-2	6	AES-MW2-100317	10/3/17	0.0010 U	0.00046 J	0.093	0.00034 U	0.00034 U	0.0011 U	0.00040 U	0.43
MW-3	6	AES-MW3-100317	10/3/17	0.0017 J	0.0036	0.19	0.00034 U	0.00063 J	0.031	0.0040	1.8
MW-4	6	AES-MW4-100417	10/4/17	0.0019 J	0.0059	0.059	0.00034 U	0.00034 U	0.0011 U	0.0018 J	0.64
MW-4	6	AES-MW4-DUP-100317	10/4/17	0.0010 U	0.0056	0.065	0.00034 U	0.00034 U	0.0011 U	0.0017 J	0.63
MW-5	6	AES-MW5-100317	10/3/17	0.0010 U	0.0060	0.034	0.00034 U	0.00034 U	0.0011 U	0.0030	0.52
MW-1	7	AES-MW1-101117	10/11/17	0.0010 U	0.00047 J	0.063	0.00034 U	0.00034 U	0.0023 J	0.0011 J	0.58
MW-2	7	AES-MW2-101117	10/11/17	0.0010 U	0.00094 J	0.10	0.00034 U	0.00034 U	0.0011 U	0.00040 U	0.41
MW-3	7	AES-MW3-101117	10/11/17	0.0017 J	0.0031	0.22	0.00034 U	0.00034 U	0.0011 U	0.0032	1.9
MW-4	7	AES-MW4-101217	10/12/17	0.0022 J	0.0033	0.047	0.00034 U	0.00034 U	0.0035	0.0017 J	0.67
MW-4	7	AES-MW4-DUP-101217	10/12/17	0.0010 U	0.0038	0.052	0.00034 U	0.00034 U	0.0033	0.0017 J	0.65
MW-5	7	AES-MW5-101117	10/11/17	0.0010 U	0.0065	0.034	0.00034 U	0.00034 U	0.0011 U	0.0032	0.49
MW-1	8	AES-MW1-101717	10/17/17	0.0010 U	0.00069 J	0.06	0.00034 U	0.00034 U	0.0011 U	0.00097 J	0.55
MW-2	8	AES-MW2-101717	10/17/17	0.0010 U	0.0014	0.089	0.00034 U	0.00034 U	0.0039	0.00040 U	0.36
MW-3	8	AES-MW3-101717	10/17/17	0.0010 U	0.0032	0.21	0.00034 U	0.00034 U	0.0024 J	0.0028	1.8
MW-4	8	AES-MW4-101717	10/17/17	0.0012 J	0.0055	0.04	0.00034 U	0.00034 U	0.0012 J	0.0018 J	0.65
MW-4	8	AES-MW4-DUP-101717	10/17/17	0.0010 U	0.0062	0.04	0.00034 U	0.00037 J	0.0012 J	0.0018 J	0.64
MW-5	8	AES-MW5-101717	10/17/17	0.0049	0.0060	0.003	0.00034 U	0.00034 U	0.0011 U	0.0029	0.47

Notes:

Sampling Date format is mmddyy

mg/L - milligrams per Liter.

MCL - Maximum Contaminant Level in mg/L.

Sample ID format is: "Site Name-MW_ID-Sampling_Date"

Sample ID with 'DUP' indicates a duplicate sample -

e.g. AES-MW4-DUP-080817 is AES-MW4-080817 duplicate.

pCi/L - picocuries per Liter

U - Not detected at indicated Method Detection Limit (MDL).

J - Result is less than the Reporting Limit but greater than

or equal to the MDL; concentration is an approximate value.

**Table 3. Analytical Results of Groundwater Samples Analyzed for Constituents in Appendix IV of CCR Rule
AES Puerto Rico, LP in Guayama, Puerto Rico**

MW ID	Sampling Event	Sample ID	Sampling Date	Constituents (mg/L)						
				Lead AL = 0.015	Lithium	Mercury MCL = 0.002	Molybdenum	Selenium MCL = 0.05	Thallium MCL = 0.002	Radium 226 & 228 MCL = 5 pCi/L
MW-1	1	AES-MW1-080817	8/8/17	0.00035 U	0.0032 U	0.000070 U	0.0022 J	0.0073	0.000085 U	0.0899 U
MW-2	1	AES-MW2-080817	8/8/17	0.00035 U	0.0032 U	0.000070 U	0.00085 U	0.00035 J	0.000085 U	0.129 U
MW-3	1	AES-MW3-080817	8/8/17	0.00035 U	0.0068	0.000070 U	0.096	0.052	0.000085 U	0.272 U
MW-4	1	AES-MW4-080817	8/8/17	0.00035 U	1.0	0.000070 U	0.44	0.011	0.000085 U	0.527
MW-4	1	AES-MW4-DUP-080817	8/8/17	0.00035 U	1.0	0.000070 U	0.45	0.011	0.000085 U	0.381
MW-5	1	AES-MW5-080917	8/9/17	0.00035 U	0.0032 U	0.000070 U	0.0022 J	0.010	0.000085 U	0.473
MW-1	2	AES-MW1-081517	8/15/17	0.00035 U	0.0032 U	0.000070 U	0.00085 U	0.0062	0.000085 U	0.349 U
MW-2	2	AES-MW2-081517	8/15/17	0.00035 U	0.0032 U	0.000070 U	0.00085 U	0.00024 U	0.000085 U	0.614
MW-3	2	AES-MW3-081517	8/15/17	0.00035 U	0.0077	0.000070 U	0.16	0.098	0.000085 U	0.417
MW-4	2	AES-MW4-081617	8/16/17	0.00035 U	1.1	0.000070 U	0.40	0.0048	0.000085 U	0.367 U
MW-4	2	AES-MW4-DUP-081617	8/16/17	0.00035 U	1.1	0.000070 U	0.38	0.0061	0.000085 U	0.600
MW-5	2	AES-MW5-081617	8/16/17	0.00035 U	0.0047 J	0.000070 U	0.0086 J	0.013	0.000085 U	0.576
MW-1	3	AES-MW1-082217	8/22/17	0.00035 U	0.0032 U	0.000070 U	0.0023 J	0.0065	0.000085 U	0.533
MW-2	3	AES-MW2-082217	8/22/17	0.00035 U	0.0032 U	0.000070 U	0.0010 J	0.00061 J	0.000085 U	-0.0403 U
MW-3	3	AES-MW3-082217	8/22/17	0.00035 U	0.0075	0.000070 U	0.2	0.13	0.000085 U	0.231 U
MW-4	3	AES-MW4-082317	8/23/17	0.00035 U	0.88	0.000070 U	0.44	0.0060	0.000085 U	-0.0815
MW-4	3	AES-MW4-DUP-082317	8/23/17	0.00035 U	1.1	0.000070 U	0.38	0.0065	0.000085 U	0.441
MW-5	3	AES-MW5-082217	8/22/17	0.00035 U	0.0044 J	0.000070 U	0.0080 J	0.014	0.000085 U	0.391 U
MW-1	4	AES-MW1-082917	8/29/17	0.00035 U	0.0032 U	0.000070 U	0.00085 U	0.0057	0.000085 U	0.620
MW-2	4	AES-MW2-082917	8/29/17	0.00035 U	0.0032 U	0.000070 U	0.00085 U	0.00044 J	0.000085 U	0.181 U
MW-3	4	AES-MW3-082917	8/29/17	0.00035 U	0.0075	0.000070 U	0.22	0.14	0.000085 U	0.374
MW-4	4	AES-MW4-083017	8/30/17	0.00035 U	0.90	0.000070 U	0.40	0.0058	0.000085 U	0.457
MW-4	4	AES-MW4-DUP-083017	8/30/17	0.00035 U	0.98	0.000070 U	0.42	0.0054	0.000085 U	0.146 U
MW-5	4	AES-MW5-082917	8/29/17	0.00035 U	0.0039 J	0.000070 U	0.0057 J	0.0099	0.000085 U	0.601
MW-1	5	AES-MW1-091217	9/12/17	0.00035 U	0.0032 U	0.000070 U	0.0018 J	0.0057	0.000085 U	0.333 U
MW-2	5	AES-MW2-091217	9/12/17	0.00035 U	0.0032 U	0.000070 U	0.00094 J	0.00046 J	0.000085 U	0.196 U
MW-3	5	AES-MW3-091217	9/12/17	0.00035 U	0.0056	0.000070 U	0.28	0.18	0.000085 U	0.462
MW-4	5	AES-MW4-091317	9/13/17	0.00035 U	0.75	0.000070 U	0.41	0.013	0.000085 U	0.361
MW-4	5	AES-MW4-DUP-091317	9/13/17	0.00035 U	0.86	0.000070 U	0.42	0.014	0.000085 U	0.656
MW-5	5	AES-MW5-091217	9/12/17	0.00035 U	0.0032 U	0.000070 U	0.0048 J	0.0053	0.000085 U	0.227 U
MW-1	6	AES-MW1-100317	10/3/17	0.00035 U	0.0032 U	0.000070 U	0.0027 J	0.0055	0.000085 U	0.230 U
MW-2	6	AES-MW2-100317	10/3/17	0.00035 U	0.0032 U	0.000070 U	0.0013 J	0.0012 J	0.000085 U	0.675
MW-3	6	AES-MW3-100317	10/3/17	0.00035 U	0.034	0.000070 U	0.53	0.57	0.000085 U	1.07
MW-4	6	AES-MW4-100417	10/4/17	0.00035 U	0.77	0.000070 U	0.44	0.011	0.000085 U	0.699
MW-4	6	AES-MW4-DUP-100317	10/4/17	0.00035 U	0.82	0.000070 U	0.46	0.0095	0.000085 U	0.528
MW-5	6	AES-MW5-100317	10/3/17	0.00035 U	0.0061	0.000070 U	0.0053 J	0.0034	0.000085 U	0.445
MW-1	7	AES-MW1-101117	10/11/17	0.00035 U	0.0032 U	0.000070 U	0.0028 J	0.0044	0.000085 U	0.362 U
MW-2	7	AES-MW2-101117	10/11/17	0.00035 U	0.0032 U	0.000070 U	0.0013 J	0.0011 J	0.000085 U	0.313 U
MW-3	7	AES-MW3-101117	10/11/17	0.00035 U	0.012	0.000070 U	0.40	0.38	0.000085 U	0.429
MW-4	7	AES-MW4-101217	10/12/17	0.00047 J	0.74	0.000070 U	0.44	0.0067	0.000085 U	0.251 U
MW-4	7	AES-MW4-DUP-101217	10/12/17	0.00047 J	0.73	0.000070 U	0.51	0.0073	0.000085 U	0.236 U
MW-5	7	AES-MW5-101117	10/11/17	0.00035 U	0.0043 J	0.000070 U	0.0054 J	0.0038	0.000085 U	0.300 U
MW-1	8	AES-MW1-101717	10/17/17	0.00035 U	0.0032 U	0.000070 U	0.0020 J	0.0074	0.000085 U	0.319 U
MW-2	8	AES-MW2-101717	10/17/17	0.00035 U	0.0032 U	0.000070 U	0.0023 J	0.0034	0.000085 U	0.439 U
MW-3	8	AES-MW3-101717	10/17/17	0.00035 U	0.010	0.000070 U	0.37	0.33	0.000085 U	0.537
MW-4	8	AES-MW4-101717	10/17/17	0.00036 J	0.69	0.000070 U	0.53	0.010	0.000085 U	0.231 U
MW-4	8	AES-MW4-DUP-101717	10/17/17	0.00035 J	0.74	0.000070 U	0.54	0.0092	0.000085 U	0.366 U
MW-5	8	AES-MW5-101717	10/17/17	0.00035 U	0.0067	0.000070 U	0.0076 J	0.0049	0.000085 U	0.282 U

Notes:

Sampling Date format is mmddyy

mg/L - milligrams per Liter.

MCL - Maximum Contaminant Level in mg/L.

Sample ID format is: "Site Name-MW_ID-Sampling_Date"

Sample ID with 'DUP' indicates a duplicate sample -

e.g. AES-MW4-DUP-080817 is AES-MW4-080817 duplicate.

pCi/L - picocuries per Liter

U - Not detected at indicated Method Detection Limit (MDL).

J - Result is less than the Reporting Limit but greater than or equal to the MDL; concentration is an approximate value.

FIGURES



Figure 1
Site Location Map
AES Puerto Rico, LP
Guayama, Puerto Rico

Legend

 AES Puerto Rico
Approximate Property Boundary



0 250 500 750 1000 1250 ft





Figure 2
Groundwater Monitoring System
AES Puerto Rico, LP
Guayama, Puerto Rico

