

January 2020

**Indian River
Generating Station
Industrial Waste Facility**

2019

**Annual Federal Groundwater Monitoring
and Corrective Action Report**

Prepared for

**Indian River Generating Station
Indian River Power LLC**

Prepared by

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1.0 Introduction

Compliance with Federal Regulations

This 2019 Federal Annual Groundwater Monitoring and Corrective Action Report has been prepared for Indian River Power, LLC (facility) to comply with the Federal Regulations Part 257 Subpart D - Standards for the Disposal of Coal Combustion Residuals (CCRs) in Landfills and Surface Impoundments Groundwater Monitoring and Corrective Action, 257.90 (e) Annual groundwater monitoring and corrective action report (Federal Register Vol. 80, No. 74, dated April 17, 2015 page 21483, amended July 30, 2018) requirements for the Indian River Generating Station Phase II Coal Ash Landfill. The purpose of this report is to document the status of the groundwater monitoring and corrective action program for the CCR landfill, summarize key actions completed, describe any problems encountered, discuss actions to resolve the problems, and project key activities for the upcoming year” (Fed. Reg. 257.90 (e)). This report includes a description of the site, groundwater monitoring program, key actions completed in 2019 along with any issues, and key activities for 2020.

Federal Regulations 257.105 (h), 257.106 (h) and 257.107 (h) also require the facility to post this annual report to the facility record by January 31, 2020, post this annual report to the facility website, and notify the State of Delaware Department of Natural Resources and Environmental Control (DNREC) that this report has been placed in the operating record.

Site Background

The coal ash landfill (landfill) has operated in accordance with permits issued by DNREC for over 35 years, with the current being Permit SW-12/01 (last modified March 9, 2018) for operating an industrial waste landfill. This permit includes a rigorous groundwater monitoring program requirement with which the facility is compliant. The USEPA Part 257 regulations regarding CCR disposal units became effective Oct 19, 2015 and contain substantially equivalent obligations, some of which currently are not fully synchronized with the existing DNREC program. It is anticipated that these differences will be resolved in the future into a combined state/federal program that includes permit conditions similar to those currently in place.

Groundwater has been monitored at the landfill site for more than 35 years and there is a substantial body of data for many of the parameters; however, only dissolved metal analyses were performed on field filtered samples through the April 2015 sampling event. Beginning with the October 2015 sampling event the analytical testing methods were changed to total analyses to comply with federal regulations and to obtain a minimum of eight background samples and additional parameters needed to make the demonstrations required in Federal Regulations Part 257.94 (Detection Monitoring Program).

2.0 Site Description

The landfill is located within the 1200-acre facility property near the town of Dagsboro, in Sussex County, Delaware. Non-hazardous CCRs that result from burning coal at the Indian River Generating Station (station) are disposed in the landfill, located about one-half mile south of the station. The landfill is separated from the generating station property area by Island Creek as shown on Figure 1.

The station has operated four generating units with nominal capacities of 90, 90, 165 and 424 megawatts (Units 1 through 4 respectively). The station generating capacity was developed between 1957 (Unit 1) and 1980 (Unit 4). Units 1 through 3 have been retired from service. Unit 4 currently operates intermittently. During 2017, 2018 and 2019, Unit 4 operated at about a capacity factor of 10%, 8% and 3.4%, respectively. The station produces CCRs that include fly ash, bottom ash, and a flue gas desulfurization (FGD) byproduct. The CCRs are removed from the power plant and hauled to the on-site landfill for disposal. The CCR may be hauled to off-site utilization projects but this is a rarity.

The landfill consists of two distinct disposal areas (Phase I and Phase II). Construction of the 43.8-acre Phase I landfill was initiated in 1979 and disposal commenced in 1980. Waste materials disposed in the Phase I landfill include primarily fly ash and bottom ash and, to a lesser extent, wastewater treatment sludge, coal pile runoff sump area sludge, coal pyrites and cooling tower sediment sludge. The Phase I landfill is unlined and was formally closed in 2011 with the completion of a cover system that consists of a geosynthetic membrane with a vegetated soil cover. DNREC approved the Phase I closure on October 14, 2014. The Phase I landfill is currently in post closure care and ceased receiving CCR waste prior to the April 17, 2015 effective date of the Federal CCR rule. Therefore, the Federal CCR Regulations do not apply to the Phase I landfill.

The Phase II landfill, contiguous to and immediately west of the Phase I landfill, is constructed with a liner system that meets Federal Regulation 257.71. Construction of the Phase II landfill is currently active and consists of two lined cells (Cell 1 is to the south and Cell 2 to the north) with a total area of 26 acres. Cell 1 is approximately 12 acres. Cell 2 is approximately 14 acres. The eastern 6.2 acres of the Phase II landfill is built over, or piggy-backs, the western slope of the Phase I landfill with its liner system separating the two phases of disposal. Cell 1 construction began in 2009 and began receiving waste in 2010. Cell 1 is currently used as a reserve disposal area. Cell 2 construction began in 2012 and began receiving waste in 2014.

Maximum design elevation of both Phase I and Phase II is 100 feet MSL. Only non-hazardous CCR wastes consisting of: coal fly ash, bottom ash, FGD byproduct; or special wastes consisting of grit blast media, soils and sediment containing ash removed during cleanup and sludge from the on-site wastewater treatment plant are permitted to be disposed of in the Phase II landfill in accordance with the current DNREC permit.

The Phase II landfill liner system has a geosynthetic membrane and a leachate collection system. Leachate collected in Cell 1 is transported via gravity to a collection sump on the south side of the landfill where it is then pumped to leachate holding tanks located approximately 1,700 ft west of the landfill. Leachate collected in Cell 2 flows by gravity to a collection sump on the north side of the landfill where it is then pumped to the leachate holding tanks. Other integral components of the CCR unit shown on Figure 1 include:

- Two sedimentation basins (the North and Southwest Sedimentation Basins) collect surface water runoff from the landfill and prevent or minimize the flow of turbid water into Island Creek. These sedimentation basins are not CCR impoundments.
- The North Sedimentation Basin has two interior bermed areas (east and west forebays) near the points of inflow into the basin. These interior bermed areas are approximately 150 x 150 ft square, each, and about five feet high. They are used to contain the distribution of sediments within the basin and facilitate clean out. Sediments are cleaned out from this interior basin, as needed.
- Haul roads used for transporting CCRs from the plant to the landfill.
- Surface water monitoring location and stream gauging station used for monitoring surface water quality in Island Creek.
- The groundwater monitoring and observation wells are used to measure water levels and select wells are sampled to monitor upgradient and downgradient groundwater water quality.
- Production wells used by the plant to generate water for various industrial purposes (e.g., primarily cooling water and to provide dust control water used at the landfill).
- Leachate Holding Tanks contain leachate pumped from the leachate collection sumps.



2.1 Site Geology

Geologically, southern Delaware is situated in the Coastal Plain physiographic province, a wedge-shaped deposit of alternating layers of sand and clay that overlies crystalline basement rocks and increases in thickness to the southeast where it reaches a thickness of 15,000 feet (Woodruff, 1977). A surficial blanket of sand, typically on the order of 100 feet in thickness, overlies much of the state and supports an unconfined aquifer below which the deeper confined units subcrop in sequence to the northwest. It is this surficial unit that supports the uppermost aquifer at the landfill and towards which the groundwater monitoring efforts are directed. The unconfined aquifer consists of channel-fill sands in northern Delaware south of the Piedmont Province and of a broad sheet of sand across central and southern Delaware. The saturated thickness of the aquifer ranges from a few feet in much of northern Delaware to more than 180 feet in southern Delaware (USGS, 2017).

The geology at the landfill, as described in "Hydrogeologic Studies - 1984 Update," prepared by Michael Baker, Jr., Inc. (Michael Baker), 1984, is as follows:

The disposal site is underlain by the Columbia sand deposits (Pleistocene age) which blanket the entire central and southern portions of the State. These deposits range in the thickness from less than 50 to over 125 feet in southern Delaware (Johnston, 1972) and are comprised of predominantly medium-grained sand with varying mixtures of silt and gravel. In the landfill area, the Columbia deposits are approximately 100 to 110 feet thick and have been found to consist of relatively homogeneous sand throughout their entire thickness. The Columbia deposits are generally classified as either SP-SM or SW-SM soils according to the Unified Soil Classification System which translates to moderately well-to-poorly sorted sand with minor amounts of silt.

Relatively deep test wells drilled for water production (wells A and B), a few hundred feet southwest of proposed Phase II (see Figure 1), encountered lenses or pockets of green silty clay interspersed with coarse sand below 110 feet (Gilbert Associates, Inc., 1980). These lenses have been assumed to mark the upper boundary of Miocene-age sediments at the site. The Miocene sediments generally consist of sand units interbedded with silty clay layers. According to Johnston (1972), the Miocene sands may directly underlie Pleistocene sands, making differentiation between the two difficult. Thus, some of the upper Miocene sands may have been identified at the site as Columbia deposits. However, it is apparent that silty clay is present below an elevation of approximately -75 to -90 ft in the site area.

2.2 Site Hydrogeology

Hydrologically the landfill is underlain by the shallow unconfined Columbia aquifer which constitutes the uppermost aquifer, extending to a depth greater than 100 ft. The silty clay layers at the top of the Miocene sediments may act as a lower confining unit or aquitard. The groundwater monitoring wells are screened in the Columbia aquifer. Water level measurements are typically collected from all groundwater monitoring and observation wells during each groundwater monitoring sampling event to collect elevation data for determining groundwater flow directions.

The overall groundwater flow direction for the Phase II Landfill is predominately north to northeast, based on groundwater contours developed from all the shallow groundwater wells at the site from previous sampling events.

3.0 Groundwater Monitoring Program

The groundwater monitoring system for the landfill was developed progressively starting in 1981 and has included monitoring points utilizing piezometers, production wells and monitoring wells. Water levels have been measured in most of these wells on a quarterly or semi-annual basis for the entire 37-year period of record.

The existing groundwater monitoring system has a network of 34 monitoring wells, six production wells and three observation wells (for monitoring water levels only). The current list of all wells at the site is presented in Attachment A with the coordinate locations provided in Attachment B. The groundwater monitoring system is shown on Figure 1. Under the current DNREC permit, all the shallow monitoring and observation wells are used for water level measurements to determine the overall site hydraulic gradients in the upper aquifer but only select monitoring wells are used for groundwater quality sampling to comply with the permit and Federal Regulations, as described below. Groundwater contour maps of the shallow monitoring wells prepared for each sampling event are included in the event sampling reports and annual reports submitted to DNREC.

For the federal regulations, it is required that a detection groundwater monitoring system be established for the Phase II landfill. In accordance with federal regulation, Part 257.91 a minimum of one background well and three downgradient wells for this detection groundwater monitoring system are required. A detection monitoring system was established in October 2017 by NRG to comply with the Federal Regulations by the report “Detection Groundwater Monitoring System Compliance Report Detection Groundwater Monitoring System Coal Combustion Residuals Landfill Indian River” (October 2017). The detection groundwater monitoring system established by this report includes a subset of the existing monitoring system described above with emphasis on monitoring groundwater quality associated with the Phase II landfill. These detection groundwater monitoring wells are listed in Table 1 and locations shown on Figure 2.

The Phase II landfill detection groundwater monitoring system includes four background wells (104, 105A, 106R and P-3R), located upgradient of the landfill; four release detection wells (102A, 103A, 327A and 319A) situated downgradient of the landfill boundary (compliant with the Part 257 mandate for a minimum of three release detection wells); and, two supplementary downgradient wells (326D and 328A) to assist with release detection farther downgradient from the landfill boundary and the north sedimentation basin.

The 2019 analytical results are provided in Attachment C – Groundwater Quality Data and include thirteen groundwater quality monitoring sampling events from October 2015 through October 2019. These groundwater quality monitoring sampling events from October 2015 through September 2017 were used to establish background groundwater conditions for the landfill detection and assessment monitoring. A background report (“Indian River Generating Station Industrial Waste Facility Background Report Groundwater Monitoring Program”, November 2017) for groundwater using these groundwater quality monitoring sampling events was prepared and submitted to DNREC to be compliant with the landfill permit and federal regulations. The background values used to evaluate the 2019 analytical results is provided in Table 3. While there is additional water quality data dating back to 1983 for some wells, only the analytical data collected since October 2015 for the detection monitoring water quality monitoring required by the Federal Regulations Part 257 Subpart D is

provided in this report.

The detection monitoring system groundwater monitoring wells were sampled semi-annually in April and October during the year 2019. Groundwater samples from these wells were analyzed for the Federal Regulation Appendix III to Part 257 - Constituents for Detection Monitoring that include boron, calcium, chloride, fluoride, pH, sulfate and total dissolved solids, along with additional DNREC required parameters (not listed).

Comparison of results of the 2019 monitoring found that the 2019 detection monitoring parameters were not statistically significant as results were below or within (as the case for pH) the background comparison values except for pH at well 105A (4.46 standard units or S.U.) and pH at well 106R (4.28 S.U.) during the October 2019 event. These pH values (i.e. wells 105 and 106R, October event) were measured below the background comparison value of 4.5 S.U. to 7.0 S.U.

Further evaluation of the October 2019 pH values at wells 105A and 106R included statistically evaluating these well pH values as an outlier by comparing pH value to the respective well pH data set dating back to 1981. The evaluation determined that these pH values lie within the respective pH data set and are not statistically significant when compared to the larger data pH data set at each well. Therefore, the pH values that are not considered an outlier or being statistically significant.

Since a statistically significant difference was not identified from the 2019 groundwater monitoring events, the landfill groundwater monitoring program continues to remain in detection monitoring.

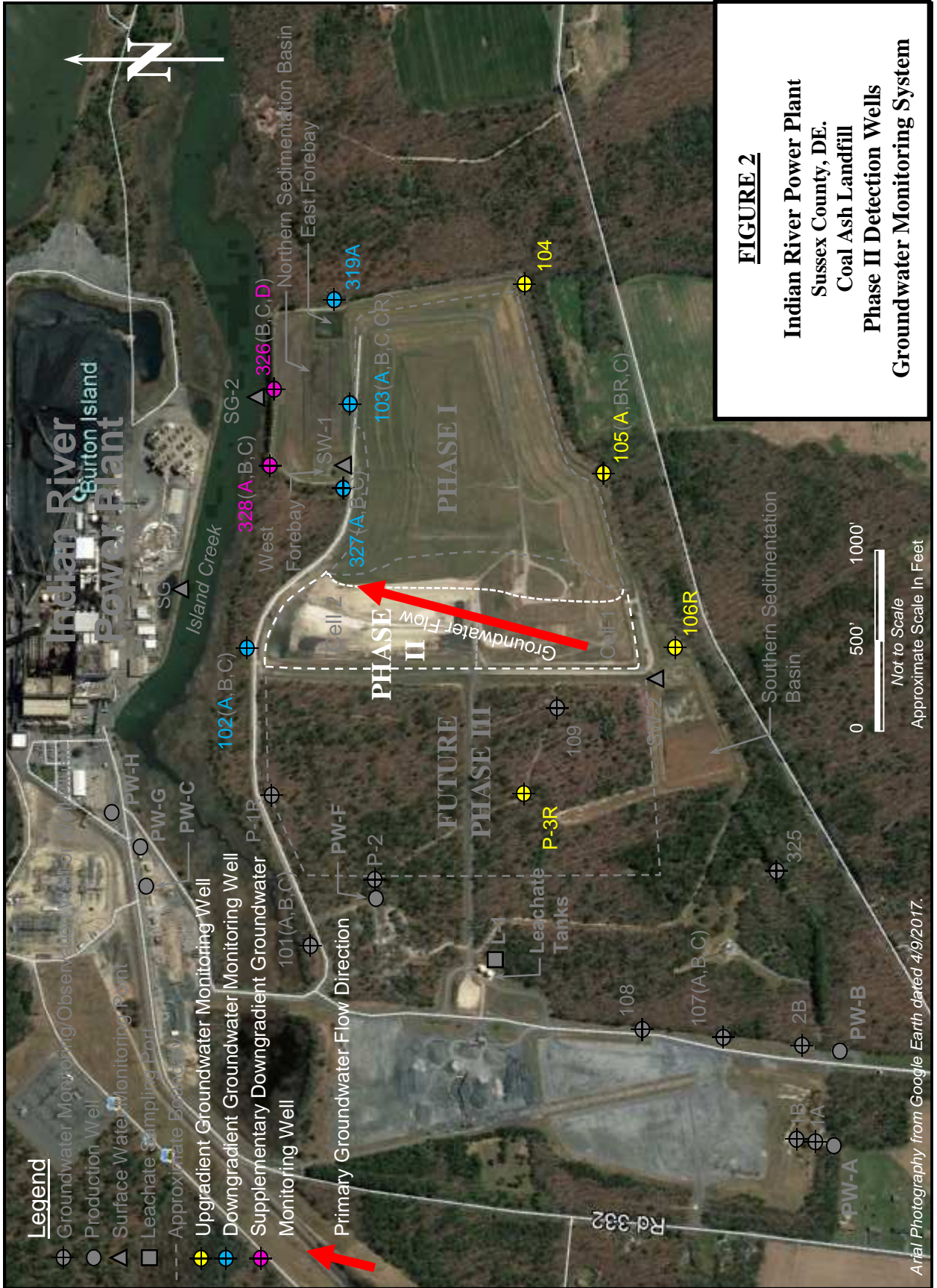


Table 1 – Phase II Landfill Detection Monitoring Wells

Well	Location	Comment
106R	Upgradient	background
105A	Upgradient	background
104	Upgradient	background
P-3R	side gradient	background
102A	downgradient - landfill boundary	release detection
327A	downgradient - landfill boundary	release detection
103A	downgradient - landfill boundary	release detection
319A	downgradient - landfill boundary	release detection
328A	downgradient - supplemental	release detection - beyond boundary
326D	downgradient - supplemental	release detection - beyond boundary

**Table 2 – Phase II Landfill Federal Detection Monitoring
Parameters and Background Comparison Values**

Parameter	Background Comparison Values
pH (standard units)	4.5-7.0
Boron (mg/L)	24.3
Calcium (mg/L)	309
Chloride (mg/L)	453
Fluoride (mg/L)	4
Sulfate (mg/L)	1,350
Total Dissolved Solids (mg/L)	2,570

4.0 Key Actions Completed in 2019

The key actions completed during 2019 include:

- Posting by NRG of the 2018 Annual Federal Annual Groundwater Monitoring and Corrective Action Report to the facility operating record by January 31, 2019.
- Posting by NRG of the 2018 Annual Federal Annual Groundwater Monitoring and Corrective Action Report to the NRG website.
- Providing written notification from NRG to DNREC, on February 5, 2019, that this report has been placed in the facility operating record.
- Completing the semi-annual groundwater quality sampling events in April and October 2019.
- Evaluating the April groundwater monitoring event and concluding that this event is not statistically significant. Because, none of the analytical results exceeded the federal groundwater detection monitoring background concentrations.
- Evaluating the October groundwater monitoring event and concluding that this event is not statistically significant. Except for the pH value at wells 105 and 106R, none of the analytical results exceeded the federal groundwater detection monitoring background concentrations. The pH values at wells 105A and 106R fell below the lower pH range used to evaluate the background condition. However, after evaluating each well pH value as an outlier to each well pH data set, it was determined that the pH values lie within the data set and are not considered an outlier or being statistically significant.

5.0 Description and Resolution of Issues

For 2019 there was no issues to report, but there was one item that was evaluated:

- Review of the October well 105A and 106R pH values revealed that these concentrations lie within each wells pH data set concentrations and are not an outlier or statistically significant.

6.0 Key Activities for the Year 2020

Key activities for 2020 to comply with the federal regulations include performing semi-annual (April and October 2020) detection monitoring groundwater sampling events, evaluating the sampling events results for statistical significance and preparing the 2019 annual report. Future activities associated with the 2020 annual report include posting the annual report to the facility operating record by January 31, 2021, posting the annual report to the facility website and, notifying DNREC that the annual report has been placed accordingly.

7.0 Reference

Gilbert Associates, Inc. 1976, 1980. Design Plan for the Environmentally Safe Disposal of Coal Ash, Indian River Power Generating Station. Report submitted to the Delaware DNREC by Delmarva Power and Light Company.

Johnston, R.H. 1973. Hydrology of the Columbia (Pleistocene) Deposits of Delaware: An Appraisal of a Regional Water Table Aquifer. Delaware Geological Survey, Bulletin No. 14.

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Michael Baker International. October 17, 2017. *Compliance Report for the Statistical Method for Groundwater Data Evaluation at the Coal Combustion Residuals Landfill*. Michael Baker International, Moon Township, Pennsylvania.

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Woodruff, K. D. 1977. Preliminary results of seismic and magnetic surveys off Delaware's coast: Delaware Geological Survey Open-File Report 10, 19 p.

ATTACHMENT A

ATTACHMENT A
GROUNDWATER WELL ELEVATION TABLES

Well	Top of PVC Casing Elevation ¹ (NAVD 88) (feet)	Ground Surface Elevation ¹ (NAVD 88) (feet)	Screen Elevation (NAVD 88) (feet)		Monitoring Zone ³
			Top ²	Bottom ²	
Production and Observation Wells					
A	25.2 ⁴	23.4 ⁴	-66.6 ⁴	-86.6 ⁴	Very Deep (Production Well)
1A	26.2	23.1	-71.7	-76.7	Very Deep (Observation Well)
1B	28.8	25.7	-71.5	-76.5	Very Deep (Observation Well)
B	20.1 ⁴	19.5 ⁴	-90.5 ⁴	-110.5 ⁴	Very Deep (Production Well)
2A	20.7	18.5	-71.5	-81.5	Very Deep (Observation Well), Abandoned 04/05/16
2B	22.9	20.0	-62.4	-72.4	Very Deep (Observation Well)
C	NA	8.2 ⁴	-191.8 ⁴	-251.8 ⁴	Very Deep Miocene Sediments (Production Well)
E	NA	NA	NA (-70') ⁵	NA (-90') ⁵	Very Deep (Production Well), Abandoned 10/11/07
F	13.3 ⁴	11.8 ⁴	-24.4 ⁴	-67.4 ⁴	Deep (Production Well) (estimated elevations)
G	NA	NA	NA (-192') ⁵	NA (-252') ⁵	Very Deep Miocene Sediments (Production Well)
H	NA	NA	NA (-187') ⁵	NA (-197') ⁵	Very Deep Miocene Sediments (Production Well)
Upgradient and Side Gradient Wells					
104	15.0	13.0	-7.0	-17.0	Shallow
105A	18.2	16.9	-34.5	-44.5	Deep
105B	18.9	17.0	-15.3	-25.3	Intermediate, Abandoned 6/29/16
105BR	18.9	16.6	-13.4	-23.4	Intermediate, Installed 6/30/16
105C	19.4	16.9	-2.3	-12.3	Shallow
106	16.4	13.7	-3.7	-13.7	Shallow, Abandoned 6/28/16
106R	16.0	13.7	-6.3	-16.3	Shallow, Installed 6/30/2016
107A	20.7	19.7	-31.2	-41.2	Deep
107B	21.3	19.7	-15.8	-25.8	Intermediate
107C	21.4	19.7	-0.5	-10.5	Shallow
108	24.6	23.2	-2.3	-12.3	Shallow
109	17.3	14.5	-3.3	-13.3	Shallow
325	22.8	22.0	15.4	-1.1	Shallow
P-1	NA	NA	NA (4') ⁵	NA (14') ⁵	Very Shallow piezometer, Abandoned 9/29/10
P-1R	14.4	10.7	-2.1	-12.1	Shallow well
P-2	13.9	11.5	7.7	-2.3	Very Shallow piezometer
P-3	NA	NA	NA (4') ⁵	NA (14') ⁵	Very Shallow piezometer, Abandoned 9/29/10
P-3R	15.7	12.7	-4.4	-14.4	Shallow well

(Table continued on the following page.)

GROUNDWATER WELL ELEVATION TABLES

(Continued from previous page.)

Well	Top of PVC Casing Elevation ¹ (NAVD 88) (feet)	Ground Surface Elevation ¹ (NAVD 88) (feet)	Screen Elevation (NAVD 88) (feet)		Monitoring Zone ³
			Top ²	Bottom ²	
Downgradient Wells					
101A	11.2	10.0	-33.6	-43.6	Deep
101B	11.9	10.0	-15.7	-25.7	Intermediate
101C	12.0	10.3	-2.7	-12.7	Shallow
102A	13.8	12.4	-35.3	-45.3	Deep
102B	14.3	12.5	-16.4	-26.4	Intermediate
102C	14.7	12.3	-5.1	-15.1	Shallow
103A	24.4	22.3	-30.6	-40.6	Deep
103B	23.6	21.7	-19.7	-29.7	Intermediate
103C	23.2	21.7	-3.9	-13.9	Shallow
103CR	20.9	17.8	-5.8	-15.8	Shallow
319A	9.1	6.9	-3.5	-13.5	Shallow
326A	NA	NA	NA (2') ⁵	NA (12') ⁵	Very Shallow (Abandoned 10/14/99)
326B	11.1	9.4	-3.0	-13.0	Shallow
326C	11.8	9.4	-19.7	-29.7	Intermediate
326D	11.9	9.2	-27.4	-37.4	Deep
327A	15.9	12.8	-35.6	-45.6	Deep
327B	13.4	10.9	-23.8	-33.8	Intermediate
327C	12.8	10.2	-8.5	-18.5	Shallow
328A	10.8	8.8	-38.2	-48.2	Deep
328B	12.1	9.4	-20.0	-30.0	Intermediate
328C	12.5	10.2	-5.3	-15.3	Shallow

Notes: NA = Information not available for inclusion in report.

¹Elevations based on 2015 and 2016 Survey. Elevations from the 2016 survey include wells 105BR, 106R, 2B, and 109 that are shown in italics.

²Bottom of well screen assumed to be at bottom of well based on field observations/measurements post 2015/2016 outer protective steel casing replacements. The elevation of the top of the well screen estimated from bottom of well elevation and length of well screen on boring logs. Screen elevations shown in italics have been revised based on measurements taken immediately after April 2016 well development.

³ The zones monitored by the well screen are installed in the Pleistocene Columbia deposits unless noted otherwise as being in the very deep Miocene sediments. The monitoring zone column describes the well screen position (very shallow, shallow, intermediate, deep or very deep) relative to the location of the other well screens within the clusters.

⁴Elevations for Production Wells A, B, C, and F are provided for comparison purposes only as they are based on the erroneous 2010 survey which may differed from 2015 survey by as much as three feet.

⁵Elevations are not available for production wells E, G, and H, and wells 326A, P-1, and P-3, so depths of well screen from ground surface are shown in parentheses for relative comparisons.

ATTACHMENT B

ATTACHMENT B
WELL LOCATION TABLE

Well ID	Easting NAD83 (feet)	Northing NAD83 (feet)	Reference
Prod. Well A	705642.953	209037.060	McCrone 2010 Survey, elevations "for
Prod. Well B	706142.961	208,996.202	McCrone 2010 Plant Grid (5/15/11)
Prod. Well C	706926.347	212810.967	McCrone 2010 Plant Grid (5/15/11)
Prod. Well E	#N/A	#N/A	Abandoned 10/11/2007
Prod. Well F	706909.894	211502.517	McCrone 2010 Plant Grid (5/15/11)
Prod. Well G	#N/A	#N/A	#N/A
Prod. Well H	#N/A	#N/A	#N/A
1A	705654.330	209131.461	McCrone 9/9/2015 Survey
1B	705667.454	209230.543	McCrone 9/9/2015 Survey
2A	706149.497	209090.921	McCrone 9/9/2015 Survey (abandoned 04/05/16)
2B	706155.361	209190.259	McCrone 07/2016 Survey
101A	706648.862	211882.885	McCrone 9/9/2015 Survey
101B	706637.978	211877.451	McCrone 9/9/2015 Survey
101C	706628.574	211875.364	McCrone 9/9/2015 Survey
102A	708275.362	212242.133	McCrone 9/9/2015 Survey
102B	708264.512	212241.292	McCrone 9/9/2015 Survey
102C	708253.234	212242.731	McCrone 9/9/2015 Survey
103A	709630.813	211645.513	McCrone 9/9/2015 Survey
103B	709618.546	211647.772	McCrone 9/9/2015 Survey
103C	709608.631	211647.253	McCrone 9/9/2015 Survey
103CR	709594.078	211656.075	McCrone 9/9/2015 Survey
104	710234.982	210689.763	McCrone 9/9/2015 Survey
105A	709212.020	210257.751	McCrone 9/9/2015 Survey
105B	709224.095	210261.73	McCrone 9/9/2015 Survey (abandoned 6/29/2016)
105BR	709,225.553	210,257.516	McCrone 07/2016 Survey
105C	709230.794	210267.676	McCrone 9/9/2015 Survey
106	708265.760	209880.189	McCrone 9/9/2015 Survey (abandoned 6/30/2016)
106R	708267.073	209868.757	McCrone 07/2016 Survey
107A	706190.059	209589.995	McCrone 9/9/2015 Survey
107B	706188.923	209601.084	McCrone 9/9/2015 Survey
107C	706187.815	209611.923	McCrone 9/9/2015 Survey
108	706208.027	210040.75	McCrone 9/9/2015 Survey
109	707945.254	210506.808	McCrone 9/9/2016 Survey
319A	710201.904	211739.894	McCrone 9/9/2015 Survey
325	707081.014	209329.118	McCrone 9/9/2015 Survey

(Continued following page.)

TABLE 2 - WELL LOCATION TABLE

(Continued from previous page.)

Well ID	Easting NAD83 (feet)	Northing NAD83 (feet)	Reference
326A	#N/A	#N/A	Abandoned 10/14/1999
326B	709697.292	212086.202	McCrone 9/9/2015 Survey
326C	709708.835	212086.115	McCrone 9/9/2015 Survey
326D	709720.261	212086.081	McCrone 9/9/2015 Survey
327A	709158.941	211697.613	McCrone 9/9/2015 Survey
327B	709149.938	211695.368	McCrone 9/9/2015 Survey
327C	709144.259	211693.533	McCrone 9/9/2015 Survey
328A	709285.804	212121.045	McCrone 9/9/2015 Survey
328B	709288.328	212114.813	McCrone 9/9/2015 Survey
328C	709290.616	212108.119	McCrone 9/9/2015 Survey
P-1	#N/A	#N/A	Abandoned 9/20/2010
P-1R	707455.468	212093.161	McCrone 9/9/2015 Survey
P-2	706973.827	211506.723	McCrone 9/9/2015 Survey
P-3	#N/A	#N/A	Abandoned 9/20/2010
P-3R	707478.115	210685.095	McCrone 9/9/2015 Survey.

ATTACHMENT C

ATTACHMENT C
PHASE II LANDFILL GROUNDWATER ANALYTICAL DATA

October 2015 to September 2017 Sampling Events for Wells:

102A

103A

104

105A

106/106R

319A

326D

327A

328A

P-3R

NRG Indian River Coal Ash Industrial Landfill

Month/Day/Year		10/27/2015	1/28/2016	4/28/2016	7/26/2016	10/20/2016	1/11/2017	4/12/2017	7/19/2017	9/12/2017	3/13/2018	10/4/2018	4/18/2019	10/23/2019	
Year-Quarter		2015-4	2016-1	2016-2	2016-3	2016-4	2017-1	2017-2	2017-3	2017-4	2018-2	2018-4	2019-2	2019-4	
Parameter	Units														
Well 102A		15102702	16012802	16042803	16072601	16102009	17011102	17041208	17071903	17091203	18031306	18100407	19041801	19102307	
Appendix III to Part 257 - Constituents for Dection Monitoring															
Boron, Total	mg/L	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11
Calcium	mg/L	10.2	9.9	10.7	10.8	11.3	10.6	10.6	10.7	10.5	10.8	11.8	12.5	13.3	
Fluoride	mg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
pH	Std.	6.16	5.57	5.35	5.93	5.67	5.81	5.63	5.51	5.21	5.79	5.33	5.5	5.21	
Sulfate	mg/L	23.4	9.9	10	9.5	10.5	9.8	9.8	9.6	9.3	8.3	7.6	6.6	7.9	
Total Dissolved Solids	mg/L	87	105	77	117	111	112	114	134	142	111	69	187	358	
Appendix IV to Part 257 - Constituents for Assessment Monitoring															
Antimony, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Arsenic, Total	mg/L	<0.0030	<0.0030	footers	<0.0030	<0.0030	<0.0030	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	
Barium, Total	mg/L	0.11	0.11	0.12	0.11	0.11	0.12	0.12	0.12	0.12					
Beryllium, Total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0011	<0.0011	<0.0011					
Cadmium, Total	mg/L	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011					
Chromium, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Cobalt, Total	mg/L	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056					
Fluoride	mg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
Lead, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Lithium, Total	mg/L	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11					
Mercury, Total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050					
Molybdenum, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Selenium, Total	mg/L	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	
Thallium, Total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	
Radium 226 & 228 (combined)	pCi/L	0.928	0.865	0.115	1.912	1.051	0.181	1.333	0.299	0.5056					

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Month/Day/Year		10/26/2015	1/28/2016	4/26/2016	7/27/2016	10/17/2016	1/12/2017	4/10/2017	7/18/2017	9/11/2017	3/14/2018	10/3/2018	4/17/2019	10/23/2019	
Year-Quarter		2015-4	2016-1	2016-2	2016-3	2016-4	2017-1	2017-2	2017-3	2017-4	2018-2	2018-4	2019-2	2019-4	
Parameter	Units														
Well 103A		15102601	16012805	16042603	16072703	16101706	17011202	17041003	17071803	17091103	18031407	18100311	19041709	19102301	
Appendix III to Part 257 - Constituents for Detection Monitoring															
Boron, Total	mg/L	9.6	8.7	5.8	5.7	8.9	5.1	7.2	4.6	5.6	4.6	4.2	1.6	1.1	
Calcium, Total	mg/L	107	101	67.5	66.7	110	65.1	91.7	55.5	76.1	57.5	62.1	26.1	19.1	
Fluoride	mg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
pH	Std.	4.8	4.82	5.07	5.43	4.95	5.08	4.92	4.99	4.81	5.31	4.82	5.13	4.92	
Sulfate	mg/L	604	500	345	362	586	338	422	257	355	266	270	98.1	66	
Total Dissolved Solids	mg/L	949	905	573	589	990	589	800	556	704	556	559	293	136	
Appendix IV to Part 257 - Constituents for Assessment Monitoring															
Antimony, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Arsenic, Total	mg/L	0.015	0.02	0.0034	0.0052	0.021	0.0092	0.013	0.0035	0.011	0.0036	0.0042	<0.0033	<0.0033	
Barium, Total	mg/L	0.023	0.024	0.013	0.013	0.036	0.015	0.02	0.012	0.022					
Beryllium, Total	mg/L	0.0064	0.0048	0.0041	0.0034	0.0057	0.0029	0.0042	0.0025	0.0034					
Cadmium, Total	mg/L	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011					
Chromium, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Cobalt, Total	mg/L	0.018	0.018	0.011	0.01	0.018	0.01	0.012	0.0074	0.011					
Fluoride	mg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
Lead, Total	mg/L	<0.0022	0.0026	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Lithium, Total	mg/L	0.45	0.46	0.36	0.28	0.44	0.26	0.32	0.24	0.28					
Mercury, Total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050					
Molybdenum, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	0.0025	0.0022	<0.0022	<0.0022	<0.0022					
Selenium, Total	mg/L	0.029	0.033	0.0062	0.0089	0.035	0.016	0.015	0.0074	0.021	0.0084	0.0085	<0.0056	<0.0056	
Thallium, Total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0011	<0.0011	<0.0011					
Radium 226 & 228 (combined)	pCi/L	1.102	2.047	2.33	0.775	1.45	0.592	2.06	0.306	0.769					

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Month/Day/Year		10/29/2015	1/26/2016	4/27/2016	7/28/2016	10/18/2016	1/10/2017	4/10/2017	7/19/2017	9/11/2017	3/13/2018	10/5/2018	4/18/2019	10/23/2019	
Year-Quarter		2015-4	2016-1	2016-2	2016-3	2016-4	2017-1	2017-2	2017-3	2017-4	2018-2	2018-4	2019-2	2019-4	
Parameter	Units	Last 106			First 106R										
Well 106/106R		15102908	16012606	Not Sampled	16072808	16101806	17011011	17041009	17071910	17091108	18031310	18100211	19041804	19102312	
Appendix III to Part 257 - Constituents for Detection Monitoring															
Boron, Total	mg/L	<0.11	<0.11		<0.11	4.6	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	
Calcium, Total	mg/L	1.4	1.4		2.7	57.4	2.2	2.2	2	1.8	2	1.8	2.3	1.9	
Fluoride	mg/L	<0.20	<0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
pH	Std.	5.15	4.66		6.04	5.32	5.5	4.99	5	3.93	5.35	4.31	4.99	4.28	
Sulfate	mg/L	8.1	8.6		9.4	8.6	8	8	6.9	6.6	6.6	23.3	9.5	6.6	
Total Dissolved Solids	mg/L	35	73		64	52	72	56	66	39	43	69	79	<25	
Appendix IV to Part 257 - Constituents for Assessment Monitoring															
Antimony, Total	mg/L	<0.0022	<0.0022		<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Arsenic, Total	mg/L	<0.0030	<0.0030		<0.0030	<0.0030	<0.0030	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	
Barium, Total	mg/L	0.028	0.029		0.037	0.037	0.045	0.045	0.045	0.044					
Beryllium, Total	mg/L	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0011	<0.0011	<0.0011					
Cadmium, Total	mg/L	<0.0011	<0.0011		<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011					
Chromium, Total	mg/L	<0.0022	<0.0022		<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Cobalt, Total	mg/L	<0.0056	<0.0056		<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056					
Fluoride	mg/L	<0.20	<0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
Lead, Total	mg/L	<0.0022	<0.0022		<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Lithium, Total	mg/L	<0.11	<0.11		<0.11	0.14	<0.11	<0.11	<0.11	<0.11					
Mercury, Total	mg/L	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050					
Molybdenum, Total	mg/L	0.0028	<0.0022		<0.0022	<0.0022	<0.0022	0.0069	<0.0022	0.007					
Selenium, Total	mg/L	<0.0056	<0.0056		<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	
Thallium, Total	mg/L	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0011	<0.0011	<0.0011					
Radium 226 & 228 (combined)	pCi/L	0.428	0.7361		0.7784	0.975	0.285	0.342	0.65	0.538					

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Month/Day/Year		10/28/2015	1/26/2016	4/27/2016	7/28/2016	10/18/2016	1/10/2017	4/11/2017	7/20/2017	9/12/2017	3/15/2018	10/2/2018	4/16/2019	10/22/2019	
Year-Quarter		2015-4	2016-1	2016-2	2016-3	2016-4	2017-1	2017-2	2017-3	2017-4	2018-2	2018-4	2019-2	2019-4	
Parameter	Units														
Well 326D		15102803	16012603	16042708	16072806	16101807	17011002	17041104	17072001	17091207	18031504	18100205	19041606	19102206	
Appendix III to Part 257 - Constituents for Detection Monitoring															
Boron, Total	mg/L	2.1	2.3	2.3	3.7	<0.11	3.8	3.3	3.6	3.7	2.8	3	3.2	2	
Calcium, Total	mg/L	31.5	25.6	36.8	48.9	2	47	43.3	45.2	48.3	39.7	38.2	42.1	26.2	
Fluoride	mg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
pH	Std.	5.67	5.42	5.87	5.97	5.51	5.68	5.58	5.57	5.32	5.65	5.43	5.64	5.3	
Sulfate	mg/L	119	123	158	283	247	258	196	204	206	174	155	186	102	
Total Dissolved Solids	mg/L	285	282	354	462	457	435	378	447	202	364	322	397	248	
Appendix IV to Part 257 - Constituents for Assessment Monitoring															
Antimony, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Arsenic, Total	mg/L	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	
Barium, Total	mg/L	0.049	0.038	0.057	0.062	0.057	0.046	0.039	0.041	0.044					
Beryllium, Total	mg/L	<0.0010	<0.0010	0.001	0.0012	<0.0010	<0.0010	<0.0011	<0.0011	<0.0011					
Cadmium, Total	mg/L	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011					
Chromium, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Cobalt, Total	mg/L	0.0078	0.0064	0.0078	0.01	0.011	0.0081	0.0068	0.0074	0.0072					
Fluoride	mg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
Lead, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Lithium, Total	mg/L	<0.11	<0.11	<0.11	<0.11	<0.11	0.12	0.15	0.15	0.14					
Mercury, Total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050					
Molybdenum, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	0.0066	0.0045	0.014	0.022	0.021					
Selenium, Total	mg/L	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	0.0056	<0.0056	
Thallium, Total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0011	<0.0011	<0.0011					
Radium 226 & 228 (combined)	pCi/L	1.107	0.3867	0.821	0.102	0.709	0.686	0.8428	0.735	0.586					

NRG Indian River Coal Ash Industrial Landfill

Month/Day/Year		10/29/2015	1/27/2016	4/28/2016	7/27/2016	10/19/2016	1/11/2017	4/13/2017	7/19/2017	9/14/2017	3/12/2018	10/4/2018	4/15/2019	10/21/2019	
Year-Quarter		2015-4	2016-1	2016-2	2016-3	2016-4	2017-1	2017-2	2017-3	2017-4	2018-2	2018-4	2019-2	2019-4	
Parameter	Units														
Well 327A		15102901	16012708	16042812	16072708	16101902	17011105	17041305	17071906	17091404	18031203	18100415	19041503	19102104	
Appendix III to Part 257 - Constituents for Detection Monitoring															
Boron, Total	mg/L	6.1	6.9	8.7	6.8	5.5	5.1	6.1	3.4	3.3	4.4	6.5	4.3	2.1	
Calcium, Total	mg/L	120	135	181	140	114	116	137	79.9	71.9	102	163	105	56.8	
Fluoride	mg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
pH	Std.	5.01	5.41	5.5	5.34	5.03	4.97	4.92	4.84	4.57	5.23	5.06	5.41	5.16	
Sulfate	mg/L	490	612	824	665	455	496	526	311	277	345	610	369	190	
Total Dissolved Solids	mg/L	956	1130	1420	1130	788	891	1100	729	678	781	1150	831	494	
Appendix IV to Part 257 - Constituents for Assessment Monitoring															
Antimony, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Arsenic, Total	mg/L	0.0082	0.012	0.011	0.0069	0.0068	0.016	0.014	0.0038	0.0048	<0.0033	0.006	0.0054	<0.0033	
Barium, Total	mg/L	0.022	0.028	0.026	0.024	0.018	0.027	0.023	0.025	0.022					
Beryllium, Total	mg/L	0.004	0.0032	0.0072	0.0063	0.0057	0.0079	0.0088	0.006	0.0043					
Cadmium, Total	mg/L	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011					
Chromium, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	0.0033	<0.0022	<0.0022	<0.0022	<0.0022					
Cobalt, Total	mg/L	0.029	0.028	0.039	0.035	0.024	0.025	0.027	0.019	0.014					
Fluoride	mg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
Lead, Total	mg/L	<0.0022	<0.0022	0.0025	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Lithium, Total	mg/L	0.16	0.37	0.32	0.21	0.29	0.27	0.31	0.18	0.22					
Mercury, Total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050					
Molybdenum, Total	mg/L	0.0074	0.05	0.041	0.0083	0.017	0.0095	0.011	0.0043	0.014					
Selenium, Total	mg/L	0.014	0.02	0.024	0.012	0.0082	0.022	0.017	0.0075	0.0072	0.0061	0.0096	0.0065	<0.0056	
Thallium, Total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0011	<0.0011	<0.0011					
Radium 226 & 228 (combined)	pCi/L	1.1155	1.081	1.54	1.2658	1.662	1.11	1.175	1.4	1.11					

NRG Indian River Coal Ash Industrial Landfill

Month/Day/Year		10/28/2015	1/27/2016	4/28/2016	7/28/2016	10/19/2016	1/10/2017	4/13/2017	7/18/2017	9/13/2017	3/15/2018	10/4/2018	4/16/2019	10/22/2019	
Year-Quarter		2015-4	2016-1	2016-2	2016-3	2016-4	2017-1	2017-2	2017-3	2017-4	2018-2	2018-4	2019-2	2019-4	
Parameter	Units														
Well 328A		15102807	16012704	16042807	16072801	16101906	17011009	17041302	17071808	17091307	18031506	18100403	19041610	19102210	
Appendix III to Part 257 - Constituents for Detection Monitoring															
Boron, Total	mg/L	8.3	10.2	7.8	6.8	2.9	4.8	4.9	5.8	2.9	6	5.2	4.9	3.1	
Calcium, Total	mg/L	154	145	136	121	45.3	118	97.8	123	64.5	133	99	98.6	59.1	
Fluoride	mg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
pH	Std.	6.14	5.81	6.05	6.13	5.87	5.81	5.81	5.69	5.55	5.7	5.78	5.95	5.63	
Sulfate	mg/L	614	696	608	564	165	467	635	449	206	481	376	380	206	
Total Dissolved Solids	mg/L	1290	1290	1110	1070	334	887	802	1070	551	1010	878	920	550	
Appendix IV to Part 257 - Constituents for Assessment Monitoring															
Antimony, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Arsenic, Total	mg/L	0.0054	0.0064	<0.0030	<0.0030	<0.0030	0.0069	<0.0033	0.004	<0.0033	<0.0033	<0.0033	0.0039	<0.0033	
Barium, Total	mg/L	0.031	0.028	0.029	0.03	0.018	0.057	0.039	0.045	0.03					
Beryllium, Total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0011	<0.0011	<0.0011					
Cadmium, Total	mg/L	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011					
Chromium, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Cobalt, Total	mg/L	0.021	0.023	0.019	0.017	0.0061	0.019	0.016	0.02	0.0094					
Fluoride	mg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
Lead, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Lithium, Total	mg/L	0.61	0.68	0.79	0.64	0.34	0.57	0.51	0.63	0.37					
Mercury, Total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050					
Molybdenum, Total	mg/L	0.41	0.41	0.54	0.27	0.13	0.14	0.12	0.13	0.092					
Selenium, Total	mg/L	0.011	0.012	0.0069	0.0064	<0.0056	0.013	<0.0056	0.012	<0.0056	0.0059	<0.0056	0.0072	<0.0056	
Thallium, Total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0011	<0.0011	<0.0011					
Radium 226 & 228 (combined)	pCi/L	0.203	0.75814	1.26	1.945	0.986	1.4156	1.767	1.312	1.817					

NRG Indian River Coal Ash Industrial Landfill

Month/Day/Year		10/28/2015	1/27/2016	4/26/2016	7/26/2016	10/20/2016	1/11/2017	4/12/2017	7/20/2017	9/13/2017	3/14/2018	10/4/2018	4/18/2019	10/23/2019	
Year-Quarter		2015-4	2016-1	2016-2	2016-3	2016-4	2017-1	2017-2	2017-3	2017-4	2018-2	2018-4	2019-2	2019-4	
Parameter	Units														
Well P-3/3R		15102811	16012710	16042609	16072607	16102012	17011109	17041201	17072005	17091311	18031414	18100408	19041806	19102311	
Appendix III to Part 257 - Constituents for Detection Monitoring															
Boron, Total	mg/L	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	
Calcium, Total	mg/L	3.1	2.9	3.2	3	3	3	3	3	3.4	3.2	3.2	2.6	2.2	
Fluoride	mg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
pH	Std.	5.22	5.06	5.24	5.41	5.12	5.43	4.98	5.03	4.26	5.23	4.66	5.03	4.69	
Sulfate	mg/L	15.7	20.5	20.4	20.2	15.9	21.1	15.5	15.7	20.2	15.3	13.3	11.1	11.4	
Total Dissolved Solids	mg/L	57	70	71	63	75	72	63	77	68	100	48	79	<25	
Appendix IV to Part 257 - Constituents for Assessment Monitoring															
Antimony, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Arsenic, Total	mg/L	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	<0.0033	
Barium, Total	mg/L	0.079	0.078	0.077	0.068	0.072	0.074	0.073	0.076	0.076					
Beryllium, Total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0011	<0.0011	<0.0011					
Cadmium, Total	mg/L	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011	<0.0011					
Chromium, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Cobalt, Total	mg/L	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056					
Fluoride	mg/L	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
Lead, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Lithium, Total	mg/L	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11	<0.11					
Mercury, Total	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050					
Molybdenum, Total	mg/L	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022	<0.0022					
Selenium, Total	mg/L	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	<0.0056	
Thallium, Total	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0011	<0.0011	<0.0011					
Radium 226 & 228 (combined)	pCi/L	0.8812	0.724	1.047	0.912	0.838	0.466	0.476	1.282	0.319					