

NRG Chalk Point, LLC Chalk Point Generating Station 25100 Eagle Harbor Road Aquasco, Maryland 20608

Certified Mail Return Receipt Requested 7011 2970 0000 4210 8244

Ms. Martha Hynson Maryland Department of the Environment Land Management Administration 1800 Washington Boulevard, Suite 605 Baltimore MD 21230-1719 RECEIVED

FEB 27 2017

LAND MANAGEMENT ADMIN. SOLID WASTE PROGRAM

February 22, 2017

Re: 2016 CCB Tonnage Report for NRG Chalk Point, LLC's Chalk Point Generating Station

Dear Ms. Hynson,

Pursuant to COMAR 26.04.10.08, enclosed please find the 2016 CCB Tonnage Reports for NRG Chalk Point, LLC's Chalk Point Generating Station.

If you have any questions regarding this report, please contact me at 301-843-4439, or at mark.nitz@nrg.com. Thank you.

Regards,

Mark Nitz

Environmental Specialist NRG Chalk Point, LLC

MARYLAND DEPARTMENT OF THE ENVIRONMENT

Land Management Administration • Solid Waste Program

1800 Washington Boulevard • Suite 605 • Baltimore Maryland 21230-1719

410-537-3315 • 800-633-6101 x3315 • www.mde.maryland.gov

Coal Combustion Byproducts (CCBs) Annual Generator Tonnage Report Instructions for Calendar Year 2016

The following is general information relating to the requirement for reporting quantities of coal combustion byproducts (CCBs) that were managed in the State of Maryland during calendar year 2016. Please answer the questions on the form provided, attaching additional information and any requested supplemental information to the back of the form. Note that the form for this year requires both volume and weight of the CCBs produced. If you know one of these parameters but not the others, for example, you have the tonnage produced but not the volume, you may calculate the other parameter; however, please provide the calculations and assumptions that you used in your estimate. Questions can be directed to the Solid Waste Program at (410) 537-3315 or via email at ed.dexter@maryland.gov.

I. Background. This requirement that generators of CCBs submit an annual report was instituted in the Code of Maryland Regulations COMAR 26.04.10.08, that was promulgated effective December 1, 2008. The regulation requires that any non-residential generator of CCBs submit a report to the Department by March 1 of each year describing the manner in which CCBs generated within the State were managed during the preceding calendar year. Additional information and specific instructions follow. For more detailed information, please refer to COMAR 26.04.10.08.

II. General Information and Applicability.

FEB 27 2017

A. Definitions. CCBs are defined in COMAR 26.04.10.02B as:

LAND MANAGEMENT ADMIN. SOLID WASTE PROGRAM

- "(3) Coal Combustion Byproducts. (a) "Coal combustion byproducts" means the residue generated by or resulting from the burning of coal.
- (b) "Coal combustion byproducts" includes fly ash, bottom ash, boiler slag, pozzolan, and other solid residuals removed by air pollution control devices from the flue gas and combustion chambers of coal burning furnaces and boilers, including flue gas desulfurization sludge and other solid residuals recovered from flue gas by wet or dry methods."

A generator of CCBs is defined in COMAR 26.04.10.02B as:

- "(9) Generator.
- (a) "Generator" means a person whose operations, activities, processes, or actions create coal combustion byproducts.
- (b) "Generator" does not include a person who only generates coal combustion byproducts by burning coal at a private residence."

08-Dec-16 Page 1 of 6

TTY Users: 800-735-2258

Facility Name: Chalk Point Generating Station CCB Tonnage Report – 2016

B. Applicability. If you or your company meets the definition of a generator of CCBs as defined above, you must provide the information as required below. For the purposes of this report, "you" shall hereinafter refer to the generator defined above. Please note that COMAR 26.04.10.08 requires generators of CCBs to submit an annual report to the Department concerning the disposition of the CCBs that they generated the previous year. THIS INCLUDES CCBS THAT WERE NOT SEPARATELY COLLECTED BUT WERE PRODUCED BY THE BURNING OF COAL AND WERE DIRECTLY CONTRIBUTED TO A PRODUCT, such as cement. Where the amount cannot be directly measured, estimates based on the amount of coal burned can be used. The method of determining the volume of CCBs produced must be described.

III. Required Information. The following information must be provided to the Department by March 1, 2017:

A. Contact information:		
Facility Name: Chalk Point Generating Sta	tion	
Name of Permit Holder: NRG Chalk Point	LLC	
Facility Address: 25100 Eagle Harbor Roa	d	
	Street	
Facility Address: Aquasco		20608
City	State	Zip
County: Prince George's County		
Contact Information (Person filing report or	r Environmental Manager)	
Facility Telephone No.: 301-843-4100	Facility Fax No.: 301	-843-4281
Contact Name: Mark Nitz		
Contact Title: Environmental Specialist		
Contact Address: 25100 Eagle Harbor Roa		
	Street	
Contact Address: Aquasco		20608
City	State	Zip
Contact Email: <u>Mark.Nitz@nrg.com</u>		
Contact Telephone No.: 301-843-4439	Contact Fax No.: 301	-843-4156

For questions on how to complete this form, please contact the Solid Waste Program at 410-537-3315

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Facility Name: Chalk Point Generating Station CCB Tonnage Report - 2016

B. A description of the process that generates the CCBs, including the type of coal or other raw material that generates the CCBs. If the space provided is insufficient, please attach additional
pages:
See Attachment A.
out Muchica and the state of th

C. The volume and weight of CCBs generated during calendar year 2016, including an identification of the different types of CCBs generated and the volume of each type generated. If the space provided is insufficient, please attach additional pages in a similar format. If converting from volume to weight or weight to volume, please provide your calculations and assumptions.

<u>Table I: Volume and Weight of CCBs Generated for Calendar Year 2016:</u> Please note the change to this table from previous years, to include both the volume and weight of the types of CCBs your facility produces.

Volume and	Weight of CCBs Ge	nerated for Calenda	ar Year 2016			
Flyash Type of CCB	Bottom Ash Type of CCB	On-Spec Gypsum Type of CCB	Off Spec Gypsum Type of CCB	WWTP Fines Type of CCB		
43,607 Volume of CCB, in Cubic Yards	4,926 Volume of CCB, in Cubic Yards	35,411 Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, ir Cubic Yards		
43,607 Weight of CCB, in Tons	4,926 Weight of CCB, in Tons	69,173 Weight of CCB, in Tons	756 Weight of CCB, in Tons	Weight of CCB, in		

08-Dec-16

Facility Name: Chalk Point Generating Station CCB Tonnage Report – 2016

Additional notes:

CCB Tonnages are reported in dry short tons. CCB volumes are reported in dry Cubic Yards.

WWTP Tons represent fines from the Flue Gas Desulfurization's Waste Water Treatment

Volumes of Flyash in Dry Cubic Yards are calculated from dry short tons using a density of 1.0

Tons/Dry CY.

<u>Volumes of Bottom Ash in Dry Cubic Yards are calculated from dry short tons using a density of 1.0 Tons/Dry CY.</u>

<u>Volumes of On-Spec Gypsum, Off-Spec Gypsum and WWTP Fines are calculated from dry</u> short tons using a density of 1.95 Tons/Dry CY.

- D. Descriptions of any modeling or risk assessments, or both, conducted relating to the CCBs or their use that were performed by you or your company during the reporting year. Please attach this information to the report.
- E. Copies of all laboratory reports of all chemical characterizations of the CCBs. Please attach this information to the report.
- F. A description of how you disposed of or used your CCBs in calendar year 2016, identifying:
- (a) The types and volume of CCBs disposed of or used (if different than described in Paragraph C above) including any CCBs stored during the previous calendar year, the location of disposal, mine reclamation and use sites, and the type and volume of CCBs disposed of or used at each site:

Of the 43,607 tons of **flyash** generated at Chalk Point in 2016, 2,230 tons were disposed of at the Brandywine Ash Site, located in Prince George's Co., Md., and 41,377 tons were sent to Morgantown for processing at the STAR Facility, where Morgantown flyash and Chalk Point flyash are comingled and injected into the Staged Turbulent Air Reactor (STAR) as a fuel to produce flyash that is suitable for beneficial uses. During the STAR process, the mass and volume of ash injected is reduced as Carbon and moisture are released from the ash, and the resulting beneficiated ash is sent to the Morgantown storage dome for sale and shipment by the SEFA Group, headquartered in Columbia, SC.

All of the 4,926 tons of **bottom ash** generated in 2016 were sent to the Brandywine Ash Site, located in Prince George's Co., Md for disposal.

On-Spec Gypsum generated at Chalk Point in 2016 was 69,173 tons. A total of 1,051 tons were stored on-site at the end of 2015, and 281 tons were stored on-site at the end of 2016. Of this total, 69,943 tons were transported by barge to Continental, Inc, located in Buchanan, NY.

Off-Spec Gypsum generated in 2016 was 756 tons, all of which was disposed of at Waste
Management's Amelia Landfill located in Jetersville, Va. WWTP Fines produced in 2016 was
322 tons, all of which was disposed of at Waste Management Inc's Amelia Landfill located in
Jetersville, Va.

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Facility Name: Chalk Point Generating Station CCB Tonnage Report – 2016 and (b) The different uses by type and volume of CCBs: On-Spec Gypsum: Volume: 69,943 tons sold. Use: Wallboard Flyash: 41,377 tons sold. Use: Cementitous material for concrete products. If the space provided is insufficient, please attach additional pages in a similar format. G. A description of how you intend to dispose of or use CCBs in the next 5 years, identifying: (a) The types and volume of CCBs intended to be disposed of or used, the location of intended disposal, mine reclamation and use sites, and the type and volume of CCBs intended to be disposed of or used at each site: FlyAsh: Approximately 43,600 tons/year to be generated, with approximately 41,400 tons to be sent to the Morgantown STAR facility for processing, and 2,200 tons to be disposed of at the Brandywine Ash site, in Prince George's County, Md. **Bottom Ash:** Anticipate 4,900 tons/year to be generated and sent to the Brandywine Ash Site, located in Prince George's Co., Md, for disposal. On-Spec Gypsum: Anticipate approximately 69,300 tons/year to be generated, with approximately 300 tons stored on site at the Chalk Point Generating Station and approximately 69,000 tons/year being transported by barge to Continental, located in Buchanan, NY. Off-Spec Gypsum: Approximately 800 tons/year to be generated and disposed of at Waste Management's Amelia Landfill located in Jetersville, Va. **WWTP Fines:** Approximately 300 tons/year to be generated and disposed of at Waste Management's Amelia Landfill located in Jetersville, Va. and (b) The different intended uses by type and volume of CCBs. On-Spec Gypsum: Volume: 69,000 tons/year to be sold. Use: Wallboard Flyash: Volume: 41,400 tons/year to be sold. Use: Cementitious material for concrete products.

If the space provided is insufficient, please attach additional pages in a similar format.

08-Dec-16 TTY Users: 800-735-2258 Facility Name: Chalk Point Generating Station CCB Tonnage Report - 2016

IV. Signature and Certification. An authorized official of the generator must sign the annual report, and certify as to the accuracy and completeness of the information contained in the annual report:

	best of my knowledge, the information contained in true, accurate, and complete.	this report and
Sy ttp Signature	Greg Staggers, General Manager, Chalk Point Generating Station 301-843-4121 Name, Title, & Telephone No. (Print or Type) gregory.staggers@nrg.com Your Email Address	2/22/2017 Date

V: Attachments (please list):

The state of the s	#16F1484: Analyses for Fly Ash, Bottom Ash, Off- Spec Gypsum	and
WTP Fines		

Page 6 of 6 08-Dec-16 TTY Users: 800-735-2258

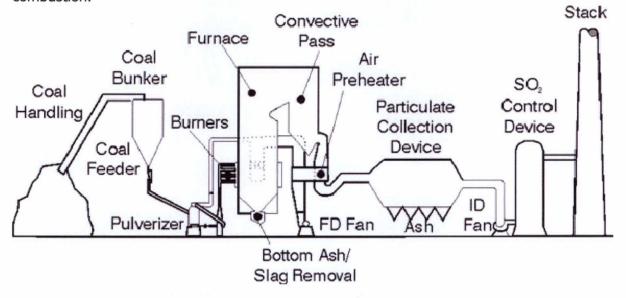
Attachment A

Chalk Point Generating Station 25100 Eagle Harbor Road, Aquasco, Prince George's County, MD. 20608 301-843-4100

The Chalk Point Generating Station is located on the Patuxent River at Swanson's Creek in Prince George's County, MD. The facility is engaged in the generation of electrical energy for sale. The primary SIC code is 4911. There are two coal burning, opposite wall fired units each with a superheater, double reheat and economizer and each rated at 365 MWs (base loaded). The primary fuel for these boilers is bituminous coal. Pollution control devices on Unit 1 include low NOx burners with Separated Over-Fired Air (SOFA), and Selective Catalytic Reduction (SCR) for control of oxides of nitrogen (NOx); and electrostatic precipitators (ESP) for the control of particulate matter. Pollution control devices on Unit 2 include low NOx burners with Separated Over-Fired Air (SOFA), and Selective Auto-Catalytic Reduction (SACR) for control of oxides of nitrogen (NOx); and electrostatic precipitators (ESP) for the control of particulate matter. A Wet Scrubber (FGD) was installed and went in service on both units in late 2009. Units 1 & 2 exhausts through the scrubber stack or, when the FGD is not in service, through a common single stack.

Coal is currently delivered by rail. The rail cars are emptied using a rotary dumper then transferred by conveyor and dravo to either a storage pile or is fed directly to the units' bunker.

The illustration below shows a simple schematic diagram for a typical pulverized coal combustion system. The coal is prepared by grinding to a very fine consistency for combustion.



Attachment A

The CCBs currently produced and used are a result of the combustion of pulverized coal.

Ash is formed in the boiler while coal combusts. In general, pulverized coal combustion results in approximately 10% ash, of which 65%–85% is fly ash, and the remainder is coarser bottom ash. Bottom ash is a coarse material and falls to the bottom of the boiler. Fly ash is finer than bottom ash and is carried along the combustion process with flue gas. Particulate collection devices remove fly ash from the flue gas and the collected ash is transferred to one of two ash silos. Flyash that is not marketed is sent to the Brandywine Ash Site, located in Prince George's County, MD. The bottom ash is conveyed out of the bottom of the boiler via a wet sluice system to hydrobins, where the water is then decanted and the bottom ash sent to the Brandywine Ash Site.

Gypsum is a byproduct of SO2 removal by the Flue Gas Desulfurization (FGD) system, commonly known as a scrubber. Chalk Point uses wet scrubbers for SO2 removal. Wet scrubbing uses a slurry of limestone alkaline sorbent to remove SO2 from the air stream. The byproduct - gypsum - is conveyed to a storage dome temporarily where it is then delivered by rail to the Morgantown Station and sent to Buchanan, New York to be made into wallboard. Gyspum that doesn't meet the specifications for wallboard production is transported for disposal to Waste Management's Amelia Landfill in Virginia. Waste Water Treatment Plant Fines (WWTP Fines) are removed from the Scrubber's WWTP as needed and transported to Waste Management's Amelia Landfill in Virginia for disposal.



Baltimore Division
2101 Van Deman Street • Baltimore, MD 21224

Phone: 410-633-1800 Fax: 410-633-6553 www.microbac.com

COVER LETTER

Glenn St. Clair

NRG Energy - Chalk Point Gen. Sta.

25100 Chalk Point Road

Aquasco, MD 20608

RE: Chalk Point-FGD Special Yearly

July 07, 2016 Report No.: 16F1484

The report of analyses contains test results for samples received at Microbac Laboratories, Inc., Baltimore Division on 06/21/2016 14:00.

The enclosed results were obtained from and applicable to the sample(s) as received at the laboratory. All sample results are reported on an "as received" basis unless otherwise noted.

All data included in this report has been reviewed and meet the applicable project and certification specific requirements, unless otherwise noted.

This report has been paginated in its entirety and shall not be reproduced except in full, without the written approval of Microbac Laboratories, Inc.

We appreciate the opportunity to service your analytical needs. If you have any questions, please feel free to contact us.

This Data Package contains the following:

- This Cover Page
- Sample Summary
- Test Results
- Certifications/Notes and Definitions
- Cooler Receipt Log
- Chain of Custody

Timberley Mack

7/7/2016

Final report reviewed by:

Kimberley M. Mack/Project Manager

Report issue date

All samples received in proper condition and results conform to ISO 17025 and TNI NELAC standards unless otherwise noted.

If we have not met or exceeded your expectations, please contact Kimberley M. Mack/Project Manager at 410-633-1800. You may also contact Trevor Boyce, President at trevor.boyce@microbac.com



Baltimore Division

2101 Van Deman Street • Baltimore, MD 21224

Phone: 410-633-1800 Fax: 410-633-6553 www.microbac.com

CERTIFICATE OF ANALYSIS

NRG Energy - Chalk Point Gen. Sta.

Project: Chalk Point-FGD Special Yearly

Report: 16F1484

25100 Chalk Point Road Aquasco, MD 20608

Project Number: Chalk Pt-FGD Special Yearly

Reported: 07/07/2016 16:53

Project Manager: Glenn St. Clair

SAMPLE SUMMARY

Sample ID	Laboratory ID	Matrix	Туре	Date Sampled	Date Received
89-061616-Gypsum	16F1484-01	Solid	Grab	06/16/2016 08:00	06/21/2016 14:00
89-061516-Flyash	16F1484-02	Solid	Grab	06/15/2016 08:35	06/21/2016 14:00
89-061516-Bottom Ash	16F1484-03	Solid	Grab	06/15/2016 08:00	06/21/2016 14:00
89-061616-WWTP Fines	16F1484-04	Solid	Grab	06/16/2016 08:00	06/21/2016 14:00

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Kimberley M. Mack, Project Manager

Original Report

Page 2 of 17



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CERTIFICATE OF ANALYSIS

NRG Energy - Chalk Point Gen. Sta.

25100 Chalk Point Road

Aquasco, MD 20608

Project: Chalk Point-FGD Special Yearly

Project Number: Chalk Pt-FGD Special Yearly

Project Manager: Glenn St. Clair

Report: 16F1484

Reported: 07/07/2016 16:53

89-061616-Gypsum

16F1484-01 (Solid) Sampled: 06/16/2016 08:00; Type: Grab

N	ALM THE	Reporting						
Analyte	Result	Limit	Units	Limits Prepared	Analyzed	Analyst	Method	Notes
		Microba	c Laboratorie	s, Inc Baltimore				
Wet Chemistry								
% Solids	78.97	0.05	% by Weight	062916 1408	063016 1130	LCR	SM 2540 G-11	
Chloride	47	12	mg/kg dry	062016 0816	062216 1153	PPM	SW-846 9056A	
pН	6.59	0.100	pH Units	070116 0838	070116 0930	LCR	SW-846 9045D	Z10
Sulfate as SO4	24000	1200	mg/kg dry	062016 0816	062216 1523	PPM	SW-846 9056A	
General Chemistry								
Paint Filter Free Liquid	Negative		P/A	062916 1036	062916 1050	VAS	SW-846 9095B	
Mercury, Total by EPA 7000 Se	eries Methods							
Mercury	0.36	0.032	mg/kg dry	062816 1215	062916 1208	APS	EPA 7471A	
Metals, Total by EPA 6000/700	0 Series Methods							
Aluminum	304	10.1	mg/kg dry	062916 1129	063016 1109	APS	EPA 6020	
Antimony	ND	5.04	mg/kg dry	062916 1129	063016 1109	APS	EPA 6020	
Arsenic	ND	5.04	mg/kg dry	062916 1129	063016 1109	APS	EPA 6020	
Barium	19.8	1.01	mg/kg dry	062916 1129	063016 1109	APS	EPA 6020	
Beryllium	ND	1.01	mg/kg dry	062916 1129	063016 1109	APS	EPA 6020	
Cadmium	ND	1.01	mg/kg dry	062916 1129	063016 1109	APS	EPA 6020	
Calcium	180000	2020	mg/kg dry	062916 1129	063016 1733	APS	EPA 6020	
Chromium	ND	5.04	mg/kg dry	062916 1129	063016 1109	APS	EPA 6020	
Cobalt	ND	1.01	mg/kg dry	062916 1129	063016 1109	APS	EPA 6020	
Copper	ND	5.04	mg/kg dry	062916 1129	063016 1109	APS	EPA 6020	
Lead	ND	1.01	mg/kg dry	062916 1129	063016 1109	APS	EPA 6020	
Magnesium	120	10.1	mg/kg dry	062916 1129	063016 1109	APS	EPA 6020	
Manganese	6.50	1.01	mg/kg dry	062916 1129	063016 1109	APS	EPA 6020	
Nickel	5.95	1.01	mg/kg dry	062916 1129	063016 1109	APS	EPA 6020	
Potassium	130	50.4	mg/kg dry	062916 1129	070716 1152	APS	EPA 6020	R1

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Timberley Mack



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CERTIFICATE OF ANALYSIS

NRG Energy - Chalk Point Gen. Sta.

25100 Chalk Point Road Aquasco, MD 20608

Project: Chalk Point-FGD Special Yearly Project Number: Chalk Pt-FGD Special Yearly

Project Manager: Glenn St. Clair

Report: 16F1484

Reported: 07/07/2016 16:53

89-061616-Gypsum

16F1484-01 (Solid) Sampled: 06/16/2016 08:00; Type: Grab

Analyte	Result	Reporting Limit	Units	Limits	Prepared	Analyzed	Analyst	Method	Notes
			Laboratori	T A NOVAK				presignation 55	व्यक्रमीत है
Metals, Total by EPA 6000/7000	Series Methods	Microba	Laboratori	.s, Inc I	Janimore				
Selenium	ND	5.04	mg/kg dry		062916 1129	063016 1109	APS	EPA 6020	
Silver	ND	1.01	mg/kg dry		062916 1129	063016 1109	APS	EPA 6020	
Sodium	ND	50.4	mg/kg dry		062916 1129	063016 1109	APS	EPA 6020	
Thallium	ND	1.01	mg/kg dry		062916 1129	063016 1109	APS	EPA 6020	
Vanadium	ND	20.2	mg/kg dry		062916 1129	063016 1109	APS	EPA 6020	
Zinc	ND	10.1	mg/kg dry		062916 1129	063016 1109	APS	EPA 6020	
TCLP Extraction by EPA 1311									
TCLP Extraction	COMPLETED		N/A		062916 0054	062916 1933	TRB	EPA 1311	
TCLP Metals by 6000/7000 Seri	es Methods								
Arsenic	ND	0.0400	mg/L	5.00	062916 2101	063016 1633	APS	EPA 6020	
Barium	ND	0.100	mg/L	100	062916 2101	063016 1351	APS	EPA 6020	
Cadmium	ND	0.0100	mg/L	1.00	062916 2101	063016 1633	APS	EPA 6020	
Chromium	ND	0.0400	mg/L	5.00	062916 2101	063016 1351	APS	EPA 6020	
Lead	0.0297	0.0200	mg/L	5.00	062916 2101	063016 1351	APS	EPA 6020	
Mercury	ND	0.0020	mg/L	0.20	063016 1343	070116 1506	APS	EPA 7470A	
Selenium	ND	0.100	mg/L	1.00	062916 2101	063016 1633	APS	EPA 6020	
Silver	ND	0.0200	mg/L	5.00	062916 2101	063016 1633	APS	EPA 6020	
		Microbac	Laboratories	, Inc Cl	nicagoland				
Metals									
Iron	440	2.4	mg/Kg		062716 0842	062816 0003	SE	SW-846 6010C	

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Kimberley M. Mack, Project Manager

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CERTIFICATE OF ANALYSIS

NRG Energy - Chalk Point Gen. Sta.

25100 Chalk Point Road Aquasco, MD 20608 Project: Chalk Point-FGD Special Yearly

Project Number: Chalk Pt-FGD Special Yearly Project Manager: Glenn St. Clair Report: 16F1484

Reported: 07/07/2016 16:53

89-061516-Flyash 16F1484-02 (Solid) Sampled: 06/15/2016 08:35; Type: Grab

Analyte	Result	Reporting Limit	Units	Limits	Prepared	Analyzed	Analyst	Method	Notes
	1100011	2 50 10				. maryzod		sulou	.10103
W. C		Microba	c Laboratorie	s, Inc E	saitimore				
Wet Chemistry									
% Solids	100.0	0.05	% by Weight		062916 1408	063016 1130	LCR	SM 2540 G-11	
Chloride	ND	10	mg/kg dry		062016 0816	062216 1218	PPM	SW-846 9056A	
pН	3.73	0.100	pH Units		070116 0838	070116 0930	LCR	SW-846 9045D	Z10a
Sulfate as SO4	18000	1000	mg/kg dry		062016 0816	062216 1547	PPM	SW-846 9056A	
General Chemistry					والجوري	4			
Paint Filter Free Liquid	Negative		P/A		062916 1036	062916 1050	VAS	SW-846 9095B	
Mercury, Total by EPA 7000 S	eries Methods								
Mercury	0.26	0.024	mg/kg dry		062816 1215	062916 1209	APS	EPA 7471A	
Metals, Total by EPA 6000/700	0 Series Methods								
Aluminum	15400	47.2	mg/kg dry		062916 1129	063016 1759	APS	EPA 6020	
Antimony	ND	4.72	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	
Arsenic	77.5	4.72	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	
Barium	245	0.943	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	
Beryllium	3.55	0.943	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	
Cadmium	ND	0.943	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	
Calcium	16500	472	mg/kg dry		062916 1129	063016 1759	APS	EPA 6020	
Chromium	47.5	4.72	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	
Cobalt	13.8	0.943	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	
Copper	36.6	4.72	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	
Lead	17.9	0.943	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	
Magnesium	1290	9.43	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	
Manganese	76.2	0.943	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	
Nickel	38.1	0.943	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	
Potassium	1880	47.2	mg/kg dry		062916 1129	070716 1159	APS	EPA 6020	
Selenium	5.68	4.72	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	

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CERTIFICATE OF ANALYSIS

NRG Energy - Chalk Point Gen. Sta.

25100 Chalk Point Road

Aquasco, MD 20608

Project: Chalk Point-FGD Special Yearly Project Number: Chalk Pt-FGD Special Yearly

Project Manager: Glenn St. Clair

Report: 16F1484

Reported: 07/07/2016 16:53

89-061516-Flyash

16F1484-02 (Solid) Sampled: 06/15/2016 08:35; Type: Grab

Analyte	Result	Reporting Limit	Units	Limits	Prepared	Analyzed	Analyst	Method	Notes
		Microba	c Laboratori	es, Inc l	Baltimore				
Metals, Total by EPA 6000/7000	Series Methods	B-10/14/19/21/04/16/21			150 144 April 1999 184 1990				
Silver	ND	0.943	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	
Sodium	950	47.2	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	
Thallium	1.82	0.943	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	
Vanadium	105	18.9	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	
Zinc	48.9	9.43	mg/kg dry		062916 1129	063016 1126	APS	EPA 6020	
CLP Extraction by EPA 1311									
TCLP Extraction	COMPLETED		N/A		062916 0054	062916 1933	TRB	EPA 1311	
CLP Metals by 6000/7000 Ser	ies Methods								
Arsenic	0.731	0.0400	mg/L	5.00	062916 2101	063016 1703	APS	EPA 6020	
Barium	0.120	0.100	mg/L	100	062916 2101	063016 1355	APS	EPA 6020	
Cadmium	0.0180	0.0100	mg/L	1.00	062916 2101	063016 1703	APS	EPA 6020	
Chromium	0.408	0.0400	mg/L	5.00	062916 2101	063016 1355	APS	EPA 6020	
Lead	0.0425	0.0200	mg/L	5.00	062916 2101	063016 1355	APS	EPA 6020	
Mercury	ND	0.0020	mg/L	0.20	063016 1343	070116 1507	APS	EPA 7470A	
Selenium	ND	0.100	mg/L	1.00	062916 2101	063016 1703	APS	EPA 6020	
Silver	ND	0.0200	mg/L	5.00	062916 2101	063016 1703	APS	EPA 6020	
		Microbac	Laboratories	, Inc Cl	hicagoland				
Aetals									
Iron	39000	24	mg/Kg		062716 0842	062816 1301	SE	SW-846 6010C	

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Kimberley M. Mack, Project Manager

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CERTIFICATE OF ANALYSIS

NRG Energy - Chalk Point Gen. Sta.

25100 Chalk Point Road Aquasco, MD 20608

Project: Chalk Point-FGD Special Yearly

Project Number: Chalk Pt-FGD Special Yearly

Project Manager: Glenn St. Clair

Report: 16F1484

Reported: 07/07/2016 16:53

89-061516-Bottom Ash

16F1484-03 (Solid) Sampled: 06/15/2016 08:00; Type: Grab

Analyte	Result	Reporting Limit	Units	Limits	Prepared	Analyzed	Analyst	Method	Notes
•		WOULD NO	c Laboratorie			,			
Wet Chemistry				ane recommo del					
% Solids	76.38	0.05	% by Weight		062916 1408	063016 1130	LCR	SM 2540 G-11	
Chloride	1600	33	mg/kg dry		062016 0816	062216 1612	PPM	SW-846 9056A	
рН	5.19	0.100	pH Units		070116 0838	070116 0930	LCR	SW-846 9045D	Z10c
Sulfate as SO4	310	13	mg/kg dry		062016 0816	062216 1242	PPM	SW-846 9056A	
General Chemistry		had al				M			
Paint Filter Free Liquid	Negative		P/A		062916 1036	062916 1050	VAS	SW-846 9095B	
Mercury, Total by EPA 7000 S	eries Methods								
Mercury	ND	0.032	mg/kg dry		062816 1215	062916 1211	APS	EPA 7471A	
Metals, Total by EPA 6000/700	0 Series Methods				Alba				
Aluminum	6640	57.5	mg/kg dry		062916 1129	063016 1804	APS	EPA 6020	
Antimony	ND	5.75	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
Arsenic	ND	5.75	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
Barium	38.9	1.15	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
Beryllium	ND	1.15	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
Cadmium	ND	1.15	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
Calcium	3640	115	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
Chromium	10.1	5.75	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
Cobalt	3.38	1.15	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
Copper	ND	5.75	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
Lead	16.8	1.15	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
Magnesium	453	11.5	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
Manganese	32.1	1.15	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
Nickel	9.15	1.15	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
Potassium	727	57.5	mg/kg dry		062916 1129	070716 1201	APS	EPA 6020	
Selenium	ND	5.75	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	

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CERTIFICATE OF ANALYSIS

NRG Energy - Chalk Point Gen. Sta.

25100 Chalk Point Road

Project: Chalk Point-FGD Special Yearly Project Number: Chalk Pt-FGD Special Yearly

Aquasco, MD 20608

Project Manager: Glenn St. Clair

Report: 16F1484

Reported: 07/07/2016 16:53

89-061516-Bottom Ash

16F1484-03 (Solid) Sampled: 06/15/2016 08:00; Type: Grab

Analyte	Result	Reporting Limit	Units	Limits	Prepared	Analyzed	Analyst	Method	Notes
		Microba	Laboratori	es, Inc I	Baltimore				
Metals, Total by EPA 6000	7000 Series Methods								
Silver	ND	1.15	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
Sodium	964	57.5	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
Thallium	ND	1.15	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
Vanadium	ND	23.0	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
Zinc	ND	11.5	mg/kg dry		062916 1129	063016 1131	APS	EPA 6020	
TCLP Extraction by EPA	1311								
TCLP Extraction	COMPLETED		N/A		062916 0054	062916 1933	TRB	EPA 1311	
TCLP Metals by 6000/700	0 Series Methods				4	<u> </u>			
Arsenic	ND	0.0400	mg/L	5.00	062916 2101	063016 1707	APS	EPA 6020	
Barium	ND	0.100	mg/L	100	062916 2101	063016 1359	APS	EPA 6020	
Cadmium	ND	0.0100	mg/L	1.00	062916 2101	063016 1707	APS	EPA 6020	
Chromium	ND	0.0400	mg/L	5.00	062916 2101	063016 1359	APS	EPA 6020	
Lead	17.9	0.0200	mg/L	5.00	062916 2101	063016 1359	APS	EPA 6020	
Mercury	ND	0.0020	mg/L	0.20	063016 1343	070116 1508	APS	EPA 7470A	
Selenium	ND	0.100	mg/L	1.00	062916 2101	063016 1707	APS	EPA 6020	
Silver	ND	0.0200	mg/L	5.00	062916 2101	063016 1707	APS	EPA 6020	
		Microbac	Laboratories	s, Inc Cl	nicagoland				
Metals									
Iron	11000	2.4	mg/Kg		062716 0842	062816 0013	SE	SW-846 6010C	

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CERTIFICATE OF ANALYSIS

NRG Energy - Chalk Point Gen. Sta.

25100 Chalk Point Road Aquasco, MD 20608

Project: Chalk Point-FGD Special Yearly

Project Number: Chalk Pt-FGD Special Yearly

Project Manager: Glenn St. Clair

Report: 16F1484

Reported: 07/07/2016 16:53

89-061616-WWTP Fines

16F1484-04 (Solid) Sampled: 06/16/2016 08:00; Type: Grab

		Reporting							
Analyte	Result	Limit	Units	Limits	Prepared	Analyzed	Analyst	Method	Notes
		Microba	c Laboratorie	s, Inc B	altimore				
Wet Chemistry			and a second sec						
% Solids	61.64	0.05	% by Weight		062916 1408	063016 1130	LCR	SM 2540 G-11	
Chloride	1100	16	mg/kg dry		062016 0816	062216 1307	PPM	SW-846 9056A	
рН	6.14	0.100	pH Units		070116 0838	070116 0930	LCR	SW-846 9045D	Z10b
Sulfate as SO4	32000	1600	mg/kg dry		062016 0816	062216 1637	PPM	SW-846 9056A	
General Chemistry									
Paint Filter Free Liquid	Negative		P/A		062916 1036	062916 1050	VAS	SW-846 9095B	
Mercury, Total by EPA 7000 So	eries Methods								
Mercury	18	0.79	mg/kg dry		062816 1215	062916 1232	APS	EPA 7471A	
Metals, Total by EPA 6000/700	0 Series Methods								
Aluminum	3920	13.7	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
Antimony	ND	6.83	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
Arsenic	9.45	6.83	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
Barium	370	1.37	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
Beryllium	ND	1.37	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
Cadmium	ND	1.37	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
Calcium	256000	2730	mg/kg dry		062916 1129	063016 1808	APS	EPA 6020	
Chromium	49.0	6.83	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
Cobalt	5.35	1.37	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
Copper	28.2	6.83	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
Lead	5.77	1.37	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
Magnesium	4090	13.7	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
Manganese	629	1.37	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
Nickel	104	1.37	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
Potassium	2280	68.3	mg/kg dry		062916 1129	070716 1202	APS	EPA 6020	
Selenium	54.4	6.83	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	

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CERTIFICATE OF ANALYSIS

NRG Energy - Chalk Point Gen. Sta.

25100 Chalk Point Road

Aquasco, MD 20608

Project: Chalk Point-FGD Special Yearly Project Number: Chalk Pt-FGD Special Yearly

Project Manager: Glenn St. Clair

Report: 16F1484

Reported: 07/07/2016 16:53

89-061616-WWTP Fines

16F1484-04 (Solid) Sampled: 06/16/2016 08:00; Type: Grab

		Reporting							
Analyte	Result	Limit	Units	Limits	Prepared	Analyzed	Analyst	Method	Notes
		Microba	Laboratorio	es, Inc I	Baltimore				
Metals, Total by EPA 6000	0/7000 Series Methods								
Silver	ND	1.37	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
Sodium	933	68.3	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
Thallium	ND	1.37	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
Vanadium	ND	27.3	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
Zinc	41.4	13.7	mg/kg dry		062916 1129	063016 1135	APS	EPA 6020	
CLP Extraction by EPA	1311								
TCLP Extraction	COMPLETED		N/A		062916 0054	062916 1933	TRB	EPA 1311	
CLP Metals by 6000/700	0 Series Methods		L						
Arsenic	ND	0.0400	mg/L	5.00	062916 2101	063016 1720	APS	EPA 6020	
Barium	ND	0.100	mg/L	100	062916 2101	063016 1430	APS	EPA 6020	
Cadmium	ND	0.0100	mg/L	1.00	062916 2101	063016 1720	APS	EPA 6020	
Chromium	ND	0.0400	mg/L	5.00	062916 2101	063016 1430	APS	EPA 6020	
Lead	ND	0.0200	mg/L	5.00	062916 2101	063016 1430	APS	EPA 6020	
Mercury	ND	0.0020	mg/L	0.20	063016 1343	070116 1516	APS	EPA 7470A	
Selenium	ND	0.100	mg/L	1.00	062916 2101	063016 1720	APS	EPA 6020	
Silver	ND	0.0200	mg/L	5.00	062916 2101	063016 1720	APS	EPA 6020	
		Microbac 1	Laboratories	, Inc Ch	nicagoland				
Ietals									
Iron	12000	2.3	mg/Kg		062716 0842	062816 0018	SE	SW-846 6010C	

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CERTIFICATE OF ANALYSIS

NRG Energy - Chalk Point Gen. Sta.

Project: Chalk Point-FGD Special Yearly

25100 Chalk Point Road

Project Number: Chalk Pt-FGD Special Yearly

Aquasco, MD 20608

Project Manager: Glenn St. Clair

Project Requested Certification(s):

A2LA (Environmental)

Analyte Certification Exception Summary

No certification exceptions

All analysis performed were analyzed under the required certification unless otherwise noted in the above summary.

Microbac Laboratories, Inc. - Baltimore

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Kimberley M. Mack, Project Manager

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Baltimore Division

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CERTIFICATE OF ANALYSIS

NRG Energy - Chalk Point Gen. Sta. 25100 Chalk Point Road

Aquasco, MD 20608

Project: Chalk Point-FGD Special Yearly Project Number: Chalk Pt-FGD Special Yearly

Project Manager: Glenn St. Clair

Report: 16F1484

Reported: 07/07/2016 16:53

Certification List

Below is a list of certifications maintained by Microbac Laboratories, Inc. All data included in this report has been reviewed for and meets all project specific and quality control requirements of the applicable accreditation, unless otherwise noted. A complete list of individual analytes pursuant to each certification below is available upon request.

Code	Description	Certification Number	Expires
Microbac Labo	oratories, Inc Baltimore		
A2LA1	A2LA (Biology)	410.02	04/30/2017
A2LA2	A2LA (Environmental)	410.01	04/30/2017
VA-B	Commonwealth of Virginia (NELAC) - Baltimore	460285	03/14/2017
CPSC	CPSC Testing of Childrens Products and Jewelry	1115	04/30/2017
Pb	Environmental Lead (ELLAP)	410.01	04/30/2017
MD	State of Maryland (Drinking Water)	109	06/30/2017
WV	West Virginia	054	09/30/2016
Microbac Labo	ratories, Inc Chicagoland		
A2LA-B	A2LA (Biology)	3045.01	09/30/2016
A2LA-C	A2LA (Chemistry)	3045.02	09/30/2016
A2LA_	A2LA ISO/IEC 17025 Biological Testing (a)	3045.01	09/30/2016
A2LA	A2LA ISO/IEC 17025 Env. DoD Testing (b)	3045.02	09/30/2016
CDC-ELITE	Center of Disease Control Legionella ELITE Membership (c	:)	04/21/2016
ILDPH	Illinois DOPH Micro analysis of drinking water (e)	1755266	12/31/2016
ILEPA	Illinois EPA drinking water, wastewater and solid waste ana	ly:200064	07/31/2016
INDEM	Indiana DEM support lab wastewater and solid waste (-)	A305-9-292	12/31/2013
INSDH	Indiana SDH chemical analysis of drinking water (g)	C-45-03	08/14/2016
INDH	Indiana SDH Micro analysis of drinking water (f)	M-45-8	12/31/2016
ISBOAH	Indiana State Board of Animal Health for microbiological an	al 18137	03/01/2017
KSDOH	Kansas Dept Health & Env. NELAP (i)	E-10397	07/31/2016
KYEPP	Kentucky EPPC analysis Underground Storage Tanks (k)	75	07/31/2016
KYDEP	Kentucky Wastewater Laboratory Certification Program (j)	90147	12/31/2016
NYDOH	New York State Department of Health Wadsworth (m)	12006	04/01/2017
NCDEN	North Carolina DENR NPDES effluent, surface water (I)	597	12/31/2016
PADEP	Pennsylvania Department of Environmental Protect (n)	68-04863	07/31/2016
USDAS	USDA Permit To Receive Soil (-)	P330-13-00270	09/18/2016
CGL-VA	VA NELAP	460280	06/14/2017
VELAP	Virginia Department of General Services Division of Consol	id 7990	06/14/2016
WADOE	Washington State Department of Ecology (p)	C992	10/23/2016

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Timberley Mack



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CERTIFICATE OF ANALYSIS

NRG Energy - Chalk Point Gen. Sta.

Project: Chalk Point-FGD Special Yearly

Report: 16F1484

25100 Chalk Point Road

Project Number: Chalk Pt-FGD Special Yearly

Reported: 07/07/2016 16:53

Aquasco, MD 20608

Project Manager: Glenn St. Clair

Microbac Laboratories, Inc. - Richmond

VA-R Commonwealth of Virginia (NELAC) - Richmond

460022

06/14/2017

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Kimberley M. Mack, Project Manager

Original Report

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CERTIFICATE OF ANALYSIS

NRG Energy - Chalk Point Gen. Sta.

Project: Chalk Point-FGD Special Yearly

Project Number: Chalk Pt-FGD Special Yearly

Qualifiers/Notes and Definitions

Aquasco, MD 20608 Project Manager: Glenn St. Clair

Report: 16F1484 Reported: 07/07/2016 16:53

General Definitions:

25100 Chalk Point Road

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

Analysis Qualifiers/Notes:

Microbac Laboratories, Inc. - Baltimore

Z10c pH@22.6°C Z10b pH@22.2°C Z10a pH@22.1°C Z10 pH@21.8°C

R1 Sample Duplicate RPD was out of acceptance limits.



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Cooler Receipt Log

Cooler ID: Default Cooler		Cooler Temp: 4.10°C Work Order: 16F1484
Custody Seals Intact:	Yes	COC/Containers Agree: Yes
Containers Intact:	Yes	Correct Preservation: Yes
Received On Ice:	Yes	Correct Number of Containers Received: Yes
Radiation Scan Acceptable:	Yes	Sufficient Sample Volume for Testing: Yes
COC Present:	Yes	Samples Received in Proper Condition: Yes

Comments:

SUBCONTRACT ORDER

Released By

Date



Microbac Baltimore Work Order:

16F1484

Microbac Laboratories, Inc. - Baltimore

SENDING LABORATORY:		REC	CEIVING LABORA	TORY:		
Microbac Laboratories, Inc E 2101 Van Deman Street Baltimore, MD 21224 Phone: 410.633.1800 Fax: 410.633.6553	Baltimore	250 Mer Pho	erobac - CGL West 84th Drive rrillville, IN 46410 one :(219) 769-8378 :: (219) 769-1664	3		
CERTIFICATION NEEDED:						
MD - Drinking Water	VA - NELAC		A2LA - Enviror	nmental		Other
NJ - NELAC	PA - NELAC		A2LA - Microb	iology		NONE
Project name: Chalk Point-FC	GD Special Yearly				Work	Order TAT: 7
Project Manager: Kimberley	M. Mack				Repor	rt Due : 06/30/2016 17:00
Sample ID: 16F1484-01		Matrix: Solid			THE RES	Sampled: 06/16/2016 08:00
Analysis	TAT	Due Date	Expires	Comm	ents	The state of the s
M_Fe_ICP / EPA 6010B	7	06/30/2016 16:00	12/13/2016 08:00			
Containers Supplied:						
Sample ID: 16F1484-02		Matrix: Solid				Sampled: 06/15/2016 08:35
Analysis	TAT	Due Date	Expires	Commo	ents	
M_Fe_ICP / EPA 6010B	7	06/30/2016 16:00	12/12/2016 08:35			
Containers Supplied:						
Sample ID: 16F1484-03		Matrix: Solid				Sampled: 06/15/2016 08:00
Analysis	TAT	Due Date	Expires	Comme	ents	i sam k jangasiananana sama
M_Fe_ICP / EPA 6010B	7	06/30/2016 16:00	12/12/2016 08:00	7-17-5	777	entroller was a service of
Containers Supplied:		Jr - 96 1 4 1				
Sample ID: 16F1484-04		Matrix: Solid				Sampled: 06/16/2016 08:00
Analysis	TAT	Due Date	Expires	Commo	ents	
M_Fe_ICP / EPA 6010B Containers Supplied:	7	06/30/2016 16:00	12/13/2016 08:00			
111/52/100	6/23/16	Fed				
Released By	Date	Recei	ved By			Date

Received By

Date

SUBCONTRACT ORDER

16F1734 Dave Bryant Microbac - BLT General Analysis - Baltimo

General Analysis - Baltimore 06/24/2016

Microbac Baltimore Work Order:

16F1484 Microbac Laboratories, In SENDING LABORATORY: RECEIVING LABORATORY: Microbac Laboratories, Inc. - Baltimore Microbac - CGL 2101 Van Deman Street 250 West 84th Drive Baltimore, MD 21224 Merrillville, IN 46410 Phone: 410.633.1800 Phone:(219) 769-8378 Fax: 410.633.6553 Fax: (219) 769-1664 16F1731 **CERTIFICATION NEEDED:** MD - Drinking Water VA - NELAC A2LA - Environmental Other NJ - NELAC PA - NELAC A2LA - Microbiology NONE Project name: Chalk Point-FGD Special Yearly Work Order TAT: 7 Project Manager: Kimberley M. Mack Report Due: 06/30/2016 17:00 Sample ID: 16F1484-01 Matrix: Solid Sampled: 06/16/2016 08:00 Analysis TAT Due Date Expires Comments M Fe ICP/EPA 6010B 06/30/2016 16:00 12/13/2016 08:00 Containers Supplied: Sample ID: 16F1484-02 Matrix: Solid -02 Sampled: 06/15/2016 08:35 Analysis TAT Due Date Expires Comments M Fe ICP/EPA 6010B 06/30/2016 16:00 12/12/2016 08:35 Containers Supplied: Sample ID: 16F1484-03 Matrix: Solid Sampled: 06/15/2016 08:00 Analysis TAT **Due Date Expires** Comments M Fe ICP/EPA 6010B 06/30/2016 16:00 12/12/2016 08:00 Containers Supplied: Sample ID: 16F1484-04 Matrix: Solid Sampled: 06/16/2016 08:00 Analysis TAT Due Date **Expires** Comments 12/13/2016 08:00 M Fe ICP/EPA 6010B 06/30/2016 16:00 **Containers Supplied:** 5211000 6/23/16 Fedex Received By Date Released By Date 260001

This calculation is for the flyash generated @ Morgantown and 41,377 tons imported from Chalk Point and will be incorporated into the main calculation that includes bottom ash, on-spec gypsum, etc.

Flyash generated at Morgantown and 41,377 tons imported from Chalk Point for processing at the STAR facility in 2016

	Morgantown (tons)	Chalk Point (tons)	Total (tons)
Generated in 2016	107,152	41,377	
Stored on site in 2015	40		
Stored on site in 2016	-22,285		
Total	84,907	41,377	126,284
Percentage	67.24%	32.76%	

Combined flyash destination from Morgantown and 41,377 tons from Chalk Point

Disposition	Tons
In State Beneficial Use	18,763
Out of State Beneficial Use	93,904
Reduseced during process in the Star Facility	13,617

Disposition	Total (tons)	Morgantown (tons)	Chalk Point (tons)
In State Beneficial Use	18,763	12615	6148
Out of State Beneficial Use	93,904	63137	30767
Reduced during process	13,617	9155	4462