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LAND MANAGEMENT SECTION



AES Warrior Run

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11600 Mexico Farms Road, SE • Cumberland, MD 21502 • (301) 777-0055 • FAX (301) 777-8772

February 25, 2016

Re: CCB Report

Ms. Martha Hynson, Chief
Solid Waste Operations Division
Maryland Department of the Environment
1800 Washington Blvd.
Baltimore, MD 21230-1719

Ms. Hynson,

Please find the enclosed CCB report for AES Warrior Run, LLC. We have completed the report as required and included applicable attachments.

If there are any questions about this report please do not hesitate to contact us.

Regards,



Jeff Leaf
Environmental Manager
AES Warrior Run

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 2015

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 2015. 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.

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

“(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.”

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, 2016:

A. Contact information:

Facility Name: AES Warrior Run

Name of Permit Holder: AES Warrior Run LLC

Facility Address: 11600 Mexico Farms RD SE
Street

Facility Address: Cumberland Maryland 21502
City State Zip

County: Allegany

Contact Information (Person filing report or Environmental Manager)

Facility Telephone No.: 301-777-0055 Facility Fax No.: 301-777-8772

Contact Name: Jeff Leaf

Contact Title: Environmental Manager

Contact Address: 11600 Mexico Farms RD SE
Street

Contact Address: Cumberland Maryland 21502
City State Zip

Contact Email: jeff.leaf@aes.com

Contact Telephone No.: 301-777-0055 ext.1167 Contact Fax No.: 301-777-8772

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

A. 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:

AES Warrior Run (AES) is an electric co-generation facility located at 11600 Mexico Farms Road, S.E in Cumberland in Allegany County in Maryland. The Facility operates a 180-megawatt coal-fired steam electric cogeneration plant and a 150-ton per day food grade carbon dioxide production plant. The facility consists of an ABB CE coal-fired atmospheric fluidized bed combustion boiler (AFBC) burning bituminous coal and Number 2 fuel oil as a start up fuel.

Selective non-catalytic reduction (SNCR) system provides supplemental control of nitrogen oxides (NO_x) to the AFBC boiler design. Sulfur dioxide (SO₂) emissions are controlled by the introduction of limestone into the fluidized bed of the boiler. A bag house controls particulate emissions in the boiler flue gas.

Bed ash is removed at the bottom of the boiler and is loaded into a silo for eventual removal. Fly ash is removed at the bottom of the baghouse, air heater, and boiler backpass sections and is kept segregated from the bed ash in a separate silo. Both flyash and bed ash are mixed with small amounts of service water (to control dusting) and loaded into trucks for disposal off-site.

AES commenced commercial operation on February 10, 2000, and produces electricity for distribution by the Potomac Electric Power Company. The applicable SIC Code for the facility is 4911 - Electric Services

B. The volume and weight of CCBs generated during calendar year 2015, 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.

Table I: Volume and Weight of CCBs Generated for Calendar Year 2015: 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 Generated for Calendar Year 2015			
Fly Ash	Bed Ash	Slag Ash	
Type of CCB	Type of CCB	Type of CCB	Type of CCB
384,260.26	163,718.57	6,806.64	
Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards
217,173.76	106,023.60	4,076.40	
Weight of CCB, in Tons	Weight of CCB, in Tons	Weight of CCB, in Tons	Weight of CCB, in Tons

Additional notes:

Slag ash consists of fly ash and bed ash as a mixture. We use the term slag ash to differentiate from the discreet fly ash and bed ash in our system.

Volumes were determined with the calculated densities of: Fly Ash = 0.57 tons/cu yd, Bed Ash = 0.65 tons/cu yd, Slag Ash = 0.60 tons/cu yd

C. 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.

D. Copies of all laboratory reports of all chemical characterizations of the CCBs. Please attach this information to the report.

E. A description of how you disposed of or used your CCBs in calendar year 2015, 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:

2015	Fly Ash Tons	Fly Ash CuYds	Bed Ash Tons	Bed Ash CuYds	Slag Ash Tons	Slag Ash CuYds	Use
Cabin Run Mine	216,917.48	383,806.81	105,787.23	163,353.58	4,076.40	6,806.64	Mine Reclamation
Jackson Mountain Coal	256.28	453.45	236.37	365.00	-	-	Mine Reclamation
Total	217,173.76	384,260.26	106,023.60	163,718.57	4,076.40	6,806.64	

and (b) The different uses by type and volume of CCBs:

See Chart Above

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

F. 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:


NO CHANGE - SAME AS PREVIOUS YEARS

and (b) The different intended uses by type and volume of CCBs.

NO CHANGE - SAME AS PREVIOUS YEARS

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

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:

<p>This is to certify that, to the best of my knowledge, the information contained in this report and any attached documents are true, accurate, and complete.</p>			
 _____ Signature	Peter Bajc Plant Manager (301) 777-0055	_____ 2-25-16 Date	
	_____ Name, Title, & Telephone No. (Print or Type)		
	peter.bajc@aes.com _____ Your Email Address		

V: Attachments (please list):

1. TCLP-Total Metals Analysis Bed Ash 02 15
2. TCLP-Total Metals Analysis Fly Ash 02 15

Laboratory Results

Geochemical Testing

Date: 16-Feb-15

CLIENT:	AES - WARRIOR RUN INC	Client Sample ID:	Bed Ash North
Lab Order:	G1502343		
Project:		Sampled By:	AES
Lab ID:	G1502343-001	Collection Date:	2/4/2015 10:30:00 AM
Matrix:	ASH	Received Date:	2/6/2015 11:23:07 AM

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
TOTAL METALS		Analyst: RLM				EPA 3050	EPA 6010
Aluminum	19800	5.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:30 AM
Antimony	< 1.0	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/12/15 1:28 PM
Arsenic	47.1	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:30 AM
Barium	172	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:30 AM
Beryllium	1.12	0.05		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:30 AM
Boron	39.3	2.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:30 AM
Cadmium	0.4	0.1		mg/Kg-dry	1	02/09/15 2:25 PM	02/12/15 1:28 PM
Chromium	79.3	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:30 AM
Cobalt	6.4	0.2		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:30 AM
Copper	18.2	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/12/15 1:28 PM
Lead	3.5	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/12/15 1:28 PM
Lithium	36.4	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:30 AM
Manganese	115	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:30 AM
Molybdenum	12.9	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/12/15 1:28 PM
Nickel	45.4	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:30 AM
Selenium	< 1.0	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/12/15 1:39 PM
Silver	< 0.2	0.2		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:30 AM
Vanadium	50.4	0.2		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:30 AM
Zinc	22.3	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:30 AM
FLUORINE		Analyst: BAB					EPA 9056A
Fluorine	71	20		mg/Kg-dry	1		02/10/15 7:13 AM
MERCURY		Analyst: GAK					ASTM D 6722
Mercury	< 0.010	0.010		mg/Kg-dry	1		02/09/15 5:32 AM
TCLP EXTRACTION		Analyst: DMM					EPA 1311
Extraction Fluid Used	2.0				1		02/08/15 9:40 AM
Final pH	12	1.0			1		02/08/15 9:40 AM
Initial pH	12	1.0			1		02/08/15 9:40 AM
TCLP, non-volatile	NA				1		02/08/15 9:40 AM
TCLP METALS		Analyst: AXH				SM 3112 B	EPA 7470
Mercury	< 0.0002	0.0002		mg/L	1	02/09/15 9:00 AM	02/09/15 2:43 PM
TCLP METALS		Analyst: RLM				EPA 200.2	EPA 6010
Aluminum	0.1	0.1		mg/L	1	02/09/15 9:40 AM	02/10/15 2:35 PM
Antimony	< 0.02	0.02		mg/L	1	02/09/15 9:40 AM	02/10/15 2:35 PM
Arsenic	< 0.02	0.02		mg/L	1	02/09/15 9:40 AM	02/10/15 2:35 PM
Barium	0.4	0.3		mg/L	1	02/09/15 9:40 AM	02/10/15 2:35 PM
Beryllium	< 0.001	0.001		mg/L	1	02/09/15 9:40 AM	02/12/15 2:09 PM
Cadmium	< 0.002	0.002		mg/L	1	02/09/15 9:40 AM	02/10/15 2:35 PM



Laboratory Results

Geochemical Testing

Date: 16-Feb-15

CLIENT:	AES - WARRIOR RUN INC	Client Sample ID:	Bed Ash North
Lab Order:	G1502343		
Project:		Sampled By:	AES
Lab ID:	G1502343-001	Collection Date:	2/4/2015 10:30:00 AM
Matrix:	ASH	Received Date:	2/6/2015 11:23:07 AM

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
Chromium	< 0.01	0.01		mg/L	1	02/09/15 9:40 AM	02/10/15 2:35 PM
Cobalt	< 0.005	0.005		mg/L	1	02/09/15 9:40 AM	02/10/15 2:35 PM
Copper	< 0.01	0.01		mg/L	1	02/09/15 9:40 AM	02/10/15 2:35 PM
Lead	0.02	0.02		mg/L	1	02/09/15 9:40 AM	02/10/15 2:35 PM
Manganese	< 0.01	0.01		mg/L	1	02/09/15 9:40 AM	02/10/15 2:35 PM
Nickel	< 0.01	0.01		mg/L	1	02/09/15 9:40 AM	02/10/15 2:35 PM
Selenium	0.03	0.02		mg/L	1	02/09/15 9:40 AM	02/10/15 2:35 PM
Silver	< 0.005	0.005		mg/L	1	02/09/15 9:40 AM	02/10/15 2:35 PM
Vanadium	0.009	0.005		mg/L	1	02/09/15 9:40 AM	02/10/15 2:35 PM
Zinc	< 0.01	0.01		mg/L	1	02/09/15 9:40 AM	02/12/15 1:30 PM



Laboratory Results

Geochemical Testing

Date: 16-Feb-15

CLIENT:	AES - WARRIOR RUN INC	Client Sample ID:	Bed Ash South
Lab Order:	G1502343		
Project:		Sampled By:	AES
Lab ID:	G1502343-002	Collection Date:	2/4/2015 10:30:00 AM
Matrix:	ASH	Received Date:	2/6/2015 11:23:07 AM

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
TOTAL METALS		Analyst: RLM				EPA 3050	EPA 6010
Aluminum	20800	5.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:33 AM
Antimony	1.6	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/12/15 1:31 PM
Arsenic	47.1	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:33 AM
Barium	168	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:33 AM
Beryllium	1.22	0.05		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:33 AM
Boron	39.2	2.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:33 AM
Cadmium	0.4	0.1		mg/Kg-dry	1	02/09/15 2:25 PM	02/12/15 1:31 PM
Chromium	68.3	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:33 AM
Cobalt	6.8	0.2		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:33 AM
Copper	17.7	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/12/15 1:31 PM
Lead	3.4	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/12/15 1:31 PM
Lithium	37.5	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:33 AM
Manganese	101	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:33 AM
Molybdenum	9.7	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/12/15 1:31 PM
Nickel	38.3	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:33 AM
Selenium	< 1.0	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/12/15 1:42 PM
Silver	< 0.2	0.2		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:33 AM
Vanadium	52.4	0.2		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:33 AM
Zinc	23.8	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:33 AM
FLUORINE		Analyst: BAB					EPA 9056A
Fluorine	60	20		mg/Kg-dry	1		02/10/15 7:13 AM
MERCURY		Analyst: GAK					ASTM D 6722
Mercury	< 0.010	0.010		mg/Kg-dry	1		02/09/15 5:32 AM
TCLP EXTRACTION		Analyst: DMM					EPA 1311
Extraction Fluid Used	2.0				1		02/08/15 9:40 AM
Final pH	12	1.0			1		02/08/15 9:40 AM
Initial pH	12	1.0			1		02/08/15 9:40 AM
TCLP, non-volatile	NA				1		02/08/15 9:40 AM
TCLP METALS		Analyst: AXH				SM 3112 B	EPA 7470
Mercury	< 0.0002	0.0002		mg/L	1	02/09/15 9:00 AM	02/09/15 2:45 PM
TCLP METALS		Analyst: RLM				EPA 200.2	EPA 6010
Aluminum	< 0.1	0.1		mg/L	1	02/09/15 9:40 AM	02/10/15 2:38 PM
Antimony	< 0.02	0.02		mg/L	1	02/09/15 9:40 AM	02/10/15 2:38 PM
Arsenic	< 0.02	0.02		mg/L	1	02/09/15 9:40 AM	02/10/15 2:38 PM
Barium	0.4	0.3		mg/L	1	02/09/15 9:40 AM	02/10/15 2:38 PM
Beryllium	< 0.001	0.001		mg/L	1	02/09/15 9:40 AM	02/12/15 2:12 PM
Cadmium	< 0.002	0.002		mg/L	1	02/09/15 9:40 AM	02/10/15 2:38 PM



Laboratory Results

Geochemical Testing

Date: 16-Feb-15

CLIENT:	AES - WARRIOR RUN INC	Client Sample ID:	Bed Ash South
Lab Order:	G1502343	Sampled By:	AES
Project:		Collection Date:	2/4/2015 10:30:00 AM
Lab ID:	G1502343-002	Received Date:	2/6/2015 11:23:07 AM
Matrix:	ASH		

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
Chromium	< 0.01	0.01		mg/L	1	02/09/15 9:40 AM	02/10/15 2:38 PM
Cobalt	< 0.005	0.005		mg/L	1	02/09/15 9:40 AM	02/10/15 2:38 PM
Copper	< 0.01	0.01		mg/L	1	02/09/15 9:40 AM	02/10/15 2:38 PM
Lead	< 0.02	0.02		mg/L	1	02/09/15 9:40 AM	02/10/15 2:38 PM
Manganese	< 0.01	0.01		mg/L	1	02/09/15 9:40 AM	02/10/15 2:38 PM
Nickel	< 0.01	0.01		mg/L	1	02/09/15 9:40 AM	02/10/15 2:38 PM
Selenium	0.02	0.02		mg/L	1	02/09/15 9:40 AM	02/10/15 2:38 PM
Silver	< 0.005	0.005		mg/L	1	02/09/15 9:40 AM	02/10/15 2:38 PM
Vanadium	0.010	0.005		mg/L	1	02/09/15 9:40 AM	02/10/15 2:38 PM
Zinc	< 0.01	0.01		mg/L	1	02/09/15 9:40 AM	02/12/15 1:33 PM



Laboratory Results

Geochemical Testing

Date: 16-Feb-15

CLIENT:	AES - WARRIOR RUN INC	Client Sample ID:	Fly Ash
Lab Order:	G1502343		
Project:		Sampled By:	AES
Lab ID:	G1502343-003	Collection Date:	2/4/2015 10:30:00 AM
Matrix:	ASH	Received Date:	2/6/2015 11:23:07 AM

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
TOTAL METALS		Analyst: RLM				EPA 3050	EPA 6010
Aluminum	37300	5.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:35 AM
Antimony	< 1.0	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/12/15 1:34 PM
Arsenic	36.0	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:35 AM
Barium	411	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:35 AM
Beryllium	2.44	0.05		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:35 AM
Boron	46.2	2.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:35 AM
Cadmium	0.8	0.1		mg/Kg-dry	1	02/09/15 2:25 PM	02/12/15 1:34 PM
Chromium	53.5	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:35 AM
Cobalt	12.2	0.2		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:35 AM
Copper	29.6	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/12/15 1:34 PM
Lead	17.1	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/12/15 1:34 PM
Lithium	73.0	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:35 AM
Manganese	75.7	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:35 AM
Molybdenum	6.3	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/12/15 1:34 PM
Nickel	35.6	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:35 AM
Selenium	13.1	1.0		mg/Kg-dry	1	02/09/15 2:25 PM	02/16/15 10:08 AM
Silver	< 0.2	0.2		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:35 AM
Vanadium	76.1	0.2		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:35 AM
Zinc	40.8	0.5		mg/Kg-dry	1	02/09/15 2:25 PM	02/11/15 11:35 AM
FLUORINE		Analyst: BAB					EPA 9056A
Fluorine	402	20		mg/Kg-dry	1		02/10/15 7:13 AM
MERCURY		Analyst: GAK					ASTM D 6722
Mercury	0.921	0.010		mg/Kg-dry	1		02/09/15 5:32 AM
TCLP EXTRACTION		Analyst: DMM					EPA 1311
Extraction Fluid Used	2.0				1		02/08/15 9:40 AM
Final pH	12	1.0			1		02/08/15 9:40 AM
Initial pH	13	1.0			1		02/08/15 9:40 AM
TCLP, non-volatile	NA				1		02/08/15 9:40 AM
TCLP METALS		Analyst: AXH				SM 3112 B	EPA 7470
Mercury	< 0.0002	0.0002		mg/L	1	02/09/15 9:00 AM	02/09/15 2:46 PM
TCLP METALS		Analyst: RLM				EPA 200.2	EPA 6010
Aluminum	0.1	0.1		mg/L	1	02/09/15 9:40 AM	02/10/15 2:41 PM
Antimony	< 0.02	0.02		mg/L	1	02/09/15 9:40 AM	02/10/15 2:41 PM
Arsenic	< 0.02	0.02		mg/L	1	02/09/15 9:40 AM	02/10/15 2:41 PM
Barium	1.2	0.3		mg/L	1	02/09/15 9:40 AM	02/10/15 2:41 PM
Beryllium	< 0.001	0.001		mg/L	1	02/09/15 9:40 AM	02/12/15 2:15 PM
Cadmium	< 0.002	0.002		mg/L	1	02/09/15 9:40 AM	02/10/15 2:41 PM



Laboratory Results

Date: 16-Feb-15

Geochemical Testing

CLIENT:	AES - WARRIOR RUN INC	Client Sample ID:	Fly Ash
Lab Order:	G1502343	Sampled By:	AES
Project:		Collection Date:	2/4/2015 10:30:00 AM
Lab ID:	G1502343-003	Received Date:	2/6/2015 11:23:07 AM
Matrix:	ASH		

Analyses	Result	QL	Q	Units	DF	Date Prepared	Date Analyzed
Chromium	0.12	0.01		mg/L	1	02/09/15 9:40 AM	02/10/15 2:41 PM
Cobalt	< 0.005	0.005		mg/L	1	02/09/15 9:40 AM	02/10/15 2:41 PM
Copper	< 0.01	0.01		mg/L	1	02/09/15 9:40 AM	02/10/15 2:41 PM
Lead	< 0.02	0.02		mg/L	1	02/09/15 9:40 AM	02/10/15 2:41 PM
Manganese	< 0.01	0.01		mg/L	1	02/09/15 9:40 AM	02/10/15 2:41 PM
Nickel	< 0.01	0.01		mg/L	1	02/09/15 9:40 AM	02/10/15 2:41 PM
Selenium	0.03	0.02		mg/L	1	02/09/15 9:40 AM	02/10/15 2:41 PM
Silver	< 0.005	0.005		mg/L	1	02/09/15 9:40 AM	02/10/15 2:41 PM
Vanadium	0.013	0.005		mg/L	1	02/09/15 9:40 AM	02/10/15 2:41 PM
Zinc	< 0.01	0.01		mg/L	1	02/09/15 9:40 AM	02/12/15 1:36 PM

