Mettiki Coal, LLC
Aaron M. Miller
Compliance Manager

February 22, 2024

Mr. Ed Dexter
Solid Waste Program
Maryland Department of the Environment
Waste Management Administration
1800 Washington Blvd., STE 605
Baltimore, MD 21230-1719

Dear Mr. Dexter:

Enclosed please find one (1) copy of our 2023 Annual Generator Tonnage Report to meet the requirements of COMAR 26.04.10.08. The report covers the period from January 1, 2023 through December 31, 2023.

If you need additional information or clarification, please call.

Sincerely,

Aaron M. Miller

MARYLAND DEPARTMENT OF THE ENVIRONMENT
Land and Materials 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 2023

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 2023. 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 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 MDE 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 MDE by March 1, 2024:

A. Contact information:

Facility Name: Mettiki Coal, LLC

Name of Permit Holder: Mettiki Coal, LLC

Facility Address: 293 Table Rock Road
Street

Facility Address: Oakland Maryland 21550
City State Zip

County: Garrett

Contact Information (Person filing report or Environmental Manager)

Facility Telephone No.: 301-334-5337 Facility Fax No.: 301-334-1602

Contact Name: Aaron Miller

Contact Title: Compliance Manager

Contact Address: 293 Table Rock Road
Street

Contact Address: Oakland MD 21550
City State Zip

Contact Email: aaron.miller@arlp.com

Contact Telephone No.: 301-334-5337 Contact Fax No.: 301-334-1602

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

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:

The process that generates the subject CCBs is the operation of a coal thermal dryer burning bituminous coal. Raw coal is first sent to the preparation plant where it is washed in a water bath to reduce sulfur and ash content. In the final stage of preparation, hot air from the pulverized coal burners is passed through a fluidized bed of the wet washed coal in the thermal dryer. This is to reduce the moisture content of the processed coal from approximately 15% to approximately 5% to meet contract specification for shipment to the customer.

C. The volume and weight of CCBs generated during calendar year 2023, 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 2023: Please note that this table includes both the volume and weight of the types of CCBs your facility produces.

Volume and Weight of CCBs Generated for Calendar Year 2023			
Thermal Dyer Ash Type of CCB	Type of CCB	Type of CCB	Type of CCB
545 Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards
920 Weight of CCB, in Tons	Weight of CCB, in Tons	Weight of CCB, in Tons	Weight of CCB, in Tons

Additional notes:

920 tons x 2000 lb/ton/ (125 lb/cu ft x 27 cu ft/ cu yd) =545 cu yd

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 2023, 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:

Volumes presented in Table I are disposed of in MDE Permit #DM 84-101 refuse disposal site on Mettiki owned property near the mine in Garrett County Maryland. All of the material is disposed of at this site and is used for the inherent alkalinity it contains.

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

100% of dryer ash is used for disposal/reclamation

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:

No anticipated changes in the next 5 years.

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

100% of dryer ash will continue to be used for the existing use

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:

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.		
Signature	Rob Colaw, General Manager, 301-334-5382 Name, Title, & Telephone No. (Print or Type) rob.colaw@arlp.com Your Email Address	2/22/2024 Date

V: Attachments (please list):

Attachment E: Chemical Characterization

Detection Summary

Client: Mettiki Coal Corporation
Project/Site: Annual CCB Sampling

Job ID: 410-152989-1

Client Sample ID: Mettiki Dryer Ash Grab Solid Sample

Lab Sample ID: 410-152989-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	7.5	F1	7.5	2.5	mg/L	5		EPA 300.0 R2.1	ASTM Leach
Barium	0.039	J	0.050	0.010	mg/L	1		6010C	TCLP

This Detection Summary does not include radiochemical test results.

Client Sample ID: Mettiki Dryer Ash Grab Solid Sample

Lab Sample ID: 410-152989-1

Date Collected: 11/30/23 10:00

Matrix: Solid

Date Received: 12/01/23 09:20

Method: EPA 300.0 R2.1 - Anions, Ion Chromatography - ASTM Leach

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	**7.5**	**F1**	7.5	2.5	mg/L			12/20/23 14:36	5

Method: SW846 6010C - Metals (ICP) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Aluminum	ND		3.0	1.0	mg/L		12/07/23 19:55	12/08/23 09:04	1
Arsenic	ND		0.50	0.16	mg/L		12/07/23 19:55	12/08/23 09:04	1
Barium	**0.039**	**J**	0.050	0.010	mg/L		12/07/23 19:55	12/08/23 09:04	1
Boron	ND		0.50	0.12	mg/L		12/07/23 19:55	12/08/23 09:04	1
Cadmium	ND		0.050	0.010	mg/L		12/07/23 19:55	12/08/23 09:04	1
Chromium	ND		0.15	0.030	mg/L		12/07/23 19:55	12/08/23 09:04	1
Copper	ND		0.20	0.080	mg/L		12/07/23 19:55	12/08/23 09:04	1
Iron	ND		2.0	0.80	mg/L		12/07/23 19:55	12/08/23 09:04	1
Lead	ND		0.15	0.071	mg/L		12/07/23 19:55	12/08/23 09:04	1
Lithium	ND		0.50	0.11	mg/L		12/07/23 19:55	12/08/23 09:04	1
Magnesium	ND		2.0	0.80	mg/L		12/07/23 19:55	12/08/23 09:04	1
Manganese	ND		0.10	0.030	mg/L		12/07/23 19:55	12/08/23 09:04	1
Molybdenum	ND		0.10	0.020	mg/L		12/07/23 19:55	12/08/23 09:04	1
Selenium	ND		0.50	0.16	mg/L		12/07/23 19:55	12/08/23 09:04	1
Silver	ND		0.10	0.040	mg/L		12/07/23 19:55	12/08/23 09:04	1
Zinc	ND	^3+	0.20	0.037	mg/L		12/07/23 19:55	12/08/23 09:04	1

Method: SW846 7470A - Mercury (CVAA) - TCLP

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	ND		0.00020	0.000079	mg/L		12/07/23 20:09	12/08/23 10:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	**0.0**		1.0	1.0	%			12/01/23 12:43	1
Percent Solids (EPA Moisture)	**100.0**		1.0	1.0	%			12/01/23 12:43	1

Qualifiers

HPLC/IC

Qualifier	Qualifier Description
F1	MS and/or MSD recovery exceeds control limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Metals

Qualifier	Qualifier Description
^3+	Reporting Limit Check Standard is outside acceptance limits, high biased
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Sturm Environmental Services

COMPANY: METTIKI COAL LLC

PROJECT: ANNUAL CCB SAMPLING

DATE SAMPLED: 11-08-23 13:30

DATE RECEIVED: 11-09-23 14:10

SAMPLED BY: GEORGE WILFONG

ACID BASE ACCOUNT

SAMPLE ID	DEPTH (feet)	Strata Thick (feet)	Rock Type	Fiz	Color	% Sulfur	Calcium Carbonate Equilvalent Tons/1000 Tons of Material: Max from % Sulfur	N.P. $CaCO_3$ Equiv	Max Needed (pH-7)	Excess $CaCO_3$	Paste pH
DRYER ASH				0	2.5Y 4/1	.128	4.00	6.84		2.84	8.5

APPROVED Kim Kriehel

Sturm Environmental Services

VICTORIA L. HOOPS, PRESIDENT

COMPANY: METTIKI COAL LLC

PROJECT: ANNUAL CCB SAMPLING

DATE SAMPLED: 11-08-23 13:30

DATE RECEIVED: 11-09-23 14:10

SULFUR FORMS

Sample Number	Total Sulfur %	Pyritic Sulfur %	Sulfate Sulfur %	Organic Sulfur %
DRYER ASH	.128	.021	.105	.002

METHOD
ASTM D2492

APPROVED: Kim Kuehl

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