



**Mettiki Coal, LLC**  
Aaron M. Miller  
Manager of Environmental Affairs

January 29, 2020

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 2019 Annual Generator Tonnage Report to meet the requirements of COMAR 26.04.10.08. The report covers the period from January 1, 2019 through December 31, 2019.

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](http://www.mde.maryland.gov)

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## **Coal Combustion Byproducts (CCBs) Annual Generator Tonnage Report Instructions for Calendar Year 2019**

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 2019. 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](mailto: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.”*

Facility Name: Mettiki Coal, LLC CCB Tonnage Report – 2019

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 MDE 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, 2020:

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.: 301-334-3952 Facility Fax No.: 301-334-1602

Contact Name: Aaron Miller

Contact Title: Mananer, Environmental

Contact Address: 293 Table Rock Road  
Street

Contact Address: Oakland Maryland 21550  
City State Zip

Contact Email: aaron.miller@arlp.com

Contact Telephone No.: 301-334-5396 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:

This space will only allow the entry of one line of text that gets progressively smaller as additional characters are added. See Attachment B.

C. The volume and weight of CCBs generated during calendar year 2019, 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 2019:** Please note that this table includes both the volume and weight of the types of CCBs your facility produces.

<u>Volume and Weight of CCBs Generated for Calendar Year 2019</u>			
Thermal Coal Dryer Ash			
Type of CCB	Type of CCB	Type of CCB	Type of CCB
849.8 cu yds			
Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards
1,434 tons			
Weight of CCB, in Tons	Weight of CCB, in Tons	Weight of CCB, in Tons	Weight of CCB, in Tons

Facility Name: Mettiki Coal, LLC

**CCB Tonnage Report – 2019**

Additional notes:

$$1434 \text{ tons} \times 2000 \text{ lb/ton} / (125 \text{ lb/cu ft} \times 27 \text{ cu ft/ cubic yard}) = 849.8 \text{ cu yds}$$

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 2019, 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:

This space will only allow the entry of one line of text that gets progressively smaller as additional characters are added. See Attachment F.

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:


The type and volume of CCB as well as the use and location as described above are expected to continue for the next 5 years.

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

100% of the dryer ash will continue to be used for disposal/reclamation on the permitted site.

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.		
 <hr/> Signature	<hr/> Dwight Kreiser, VP of Operations 301-334-5382 Name, Title, & Telephone No. (Print or Type)	<hr/> 1/28/2020 Date
	<hr/> dwight.kreiser@arlp.com Your Email Address	

**V: Attachments (please list):**

- Attachment B - Process Description
- Attachment E - Chemical Characterization
- Attachment F - Disposal Description
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## **Attachment B – Process Description**

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.



Sample Description: **Mettiki Dryer Ash Grab Solid Sample  
 TCLP NON-VOLATILE EXTRACTION  
 Quarterly CCB Reporting**

**Mettiki Coal Corporation**  
 ELLE Sample #: TL 1208868  
 ELLE Group #: 2076131  
 Matrix: Leachate

Project Name: **Quarterly CCB Reporting**

Submittal Date/Time: 11/22/2019 08:42  
 Collection Date/Time: 11/14/2019 10:00

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit	Dilution Factor
<b>Metals</b>			<b>SW-846 6010B</b>	<b>mg/l</b>	
01743	Aluminum	7429-90-5	N.D.	0.153	1
07035	Arsenic	7440-38-2	N.D.	0.0160	1
07046	Barium	7440-39-3	0.157	0.0010	1
08014	Boron	7440-42-8	0.119	0.0120	1
07049	Cadmium	7440-43-9	N.D.	0.0010	1
07051	Chromium	7440-47-3	N.D.	0.0016	1
07053	Copper	7440-50-8	N.D.	0.0120	1
01754	Iron	7439-89-6	N.D.	0.0400	1
07055	Lead	7439-92-1	N.D.	0.0071	1
01756	Lithium	7439-93-2	0.0762	0.0110	1
07058	Manganese	7439-96-5	0.176	0.0030	1
07060	Molybdenum	7439-98-7	0.0235	0.0020	1
07036	Selenium	7782-49-2	N.D.	0.0160	1
07066	Silver	7440-22-4	N.D.	0.0050	1
07072	Zinc	7440-66-6	0.0325	0.0037	1
			<b>SW-846 7470A</b>	<b>mg/l</b>	
00259	Mercury	7439-97-6	N.D.	0.000050	1

### Sample Comments

If the analysis is for determination of Hazardous Waste Characteristics, see Table 1 in EPA Code of Federal Regulations 40 CFR 261.24.

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01743	Aluminum	SW-846 6010B	1	193371404502	12/05/2019 05:46	Lisa J Cooke	1
07035	Arsenic	SW-846 6010B	1	193371404502	12/05/2019 05:46	Lisa J Cooke	1
07046	Barium	SW-846 6010B	1	193371404502	12/05/2019 05:46	Lisa J Cooke	1
08014	Boron	SW-846 6010B	1	193371404502	12/05/2019 05:46	Lisa J Cooke	1
07049	Cadmium	SW-846 6010B	1	193371404502	12/05/2019 05:46	Lisa J Cooke	1
07051	Chromium	SW-846 6010B	1	193371404502	12/05/2019 05:46	Lisa J Cooke	1
07053	Copper	SW-846 6010B	1	193371404502	12/05/2019 05:46	Lisa J Cooke	1
01754	Iron	SW-846 6010B	1	193371404502	12/05/2019 05:46	Lisa J Cooke	1
07055	Lead	SW-846 6010B	1	193371404502	12/05/2019 05:46	Lisa J Cooke	1
01756	Lithium	SW-846 6010B	1	193371404502	12/05/2019 05:46	Lisa J Cooke	1
07058	Manganese	SW-846 6010B	1	193371404502	12/05/2019 05:46	Lisa J Cooke	1
07060	Molybdenum	SW-846 6010B	1	193371404502	12/05/2019 05:46	Lisa J Cooke	1
07036	Selenium	SW-846 6010B	1	193371404502	12/05/2019 05:46	Lisa J Cooke	1
07066	Silver	SW-846 6010B	1	193371404502	12/05/2019 05:46	Lisa J Cooke	1
07072	Zinc	SW-846 6010B	1	193371404502	12/05/2019 05:46	Lisa J Cooke	1
00259	Mercury	SW-846 7470A	1	193370571304	12/05/2019 09:54	Damary Valentin	1
14045	ICP-WW/TL, 3010A (tot) - U345	SW-846 3010A	1	193371404502	12/04/2019 13:15	JoElla L Rice	1
05713	VW SW846 Hg Digest	SW-846 7470A	1	193370571304	12/04/2019 14:55	JoElla L Rice	1
00947	TCLP Non-volatile Extraction	SW-846 1311	1	19330-2807-947A	11/26/2019 13:02	Nicholas W Shroyer	n.a.

Sample Description: **Mettiki Dryer Ash Grab Solid Sample  
Quarterly CCB Reporting**

Mettiki Coal Corporation  
ELLE Sample #: SW 1208867  
ELLE Group #: 2076131  
Matrix: Solid Waste

Project Name: **Quarterly CCB Reporting**

Submittal Date/Time: 11/22/2019 08:42  
Collection Date/Time: 11/14/2019 10:00

CAT No.	Analysis Name	CAS Number	Dry Result	Dry Method Detection Limit	Dilution Factor
<b>Metals</b>			<b>mg/kg</b>	<b>mg/kg</b>	
		<b>SW-846 6010B</b>			
01643	Aluminum	7429-90-5	6,830	10.4	1
06935	Arsenic	7440-38-2	3.62	1.18	1
06946	Barium	7440-39-3	64.7	0.147	1
07914	Boron	7440-42-8	7.47 J	5.98	1
06949	Cadmium	7440-43-9	N.D.	0.0980	1
06951	Chromium	7440-47-3	6.19	0.176	1
06953	Copper	7440-50-8	9.21	0.686	1
01654	Iron	7439-89-6	3,450	6.08	1
06955	Lead	7439-92-1	1.33 J	0.588	1
01656	Lithium	7439-93-2	15.6	1.4	1
06958	Manganese	7439-96-5	16.0	0.510	1
06960	Molybdenum	7439-98-7	2.34	0.255	1
06936	Selenium	7782-49-2	N.D.	1.47	1
06966	Silver	7440-22-4	N.D.	0.392	1
06972	Zinc	7440-66-6	9.89	0.980	1
<b>SW-846 7471A</b>			<b>mg/kg</b>	<b>mg/kg</b>	
00159	Mercury	7439-97-6	N.D.	0.0149	1
<b>Wet Chemistry</b>			<b>mg/kg</b>	<b>mg/kg</b>	
		<b>EPA 300.0</b>			
07338	Sulfate by IC (solid)	14808-79-8	1,120	246	50
<b>Wet Chemistry</b>			<b>%</b>	<b>%</b>	
		<b>SM 2540 G-2011</b>			
		<b>%Moisture Calc</b>			
00111	Moisture	n.a.	N.D.	0.50	1
Moisture represents the loss in weight of the sample after oven drying at 103 - 105 degrees Celsius. The moisture result reported is on an as-received basis.					

### Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
01643	Aluminum	SW-846 6010B	1	193361404904	12/02/2019 23:45	Elaine F Stoltzfus	1
06935	Arsenic	SW-846 6010B	1	193361404904	12/02/2019 23:45	Elaine F Stoltzfus	1
06946	Barium	SW-846 6010B	1	193361404904	12/02/2019 23:45	Elaine F Stoltzfus	1
07914	Boron	SW-846 6010B	1	193361404904	12/02/2019 23:45	Elaine F Stoltzfus	1
06949	Cadmium	SW-846 6010B	1	193361404904	12/02/2019 23:45	Elaine F Stoltzfus	1
06951	Chromium	SW-846 6010B	1	193361404904	12/02/2019 23:45	Elaine F Stoltzfus	1
06953	Copper	SW-846 6010B	1	193361404904	12/02/2019 23:45	Elaine F Stoltzfus	1
01654	Iron	SW-846 6010B	1	193361404904	12/02/2019 23:45	Elaine F Stoltzfus	1
06955	Lead	SW-846 6010B	1	193361404904	12/02/2019 23:45	Elaine F Stoltzfus	1
01656	Lithium	SW-846 6010B	1	193361404904	12/02/2019 23:45	Elaine F Stoltzfus	1
06958	Manganese	SW-846 6010B	1	193361404904	12/02/2019 23:45	Elaine F Stoltzfus	1
06960	Molybdenum	SW-846 6010B	1	193361404904	12/02/2019 23:45	Elaine F Stoltzfus	1
06936	Selenium	SW-846 6010B	1	193361404904	12/02/2019 23:45	Elaine F Stoltzfus	1
06966	Silver	SW-846 6010B	1	193361404904	12/02/2019 23:45	Elaine F Stoltzfus	1
06972	Zinc	SW-846 6010B	1	193361404904	12/02/2019 23:45	Elaine F Stoltzfus	1

## Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value $\geq$ the Method Detection Limit (MDL or DL) and $<$ the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column $>40\%$ . The lower result is reported.
P^	Concentration difference between the primary and confirmation column $> 40\%$ . The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column $>100\%$ . The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods. Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.



## **Attachment F – Disposal Description**

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.