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 2017. 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.

<u>I. Background.</u> 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."

02-Jan-18 TTY Users: 800-735-2258

Facility Name:	Heidelberg Materials	CCB Tonnage Report – 2023
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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, 2018:

A. Contact inform					
Facility Name: H	Heidelberg Materials	S US Cement	LLC		
Name of Permit H					
Facility Address:	675 Quaker Hill Ro	ad			
•	Street				
Facility Address:	Union Bridge	MD	21791		
	City	State	Zip		
County: Carr	oll				
Contact Information	on (Person filing report or Envi	ronmental Manager)			
Facility Telephone	_{e No.:} 410-386-1210	Facility Fax No.:	410-386-1296		
	Kurt Deery, REM				
	nvironmental Engine	eer			
Contact Address:					
	Stro	eet			
Contact Address:	Same				
	City	State	Zip		
Contact Email: K	urt.Deery@Heidelber	gmaterials.con	n		
Contact Telephone	e No.: 410-386-1229	Contact Fax No.:	same		

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

02-Jan-18

TTY Users: 800-735-2258

Facility Name:	Heidelberg Materials	CCB Tonnage Report – 2023

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:

ash is incorporated into the clinker produced inside of the kiln. The coal ash during production of clinker is converted to calcium silicates.				

Heidelberg Materials generates coal ash by burning coal to fire the cement kiln. All coal

C. The volume and weight of CCBs generated during calendar year 2017, 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				
Coal Ash consumed in mfg process From Heidelberg burning coal in cement kiln Gypsum consumed in mfg process		Delivered Fly Ash Consumed by Heidelbergmaterials in mfg. process	Delivered Ponded/Bottom Ash consumed by Lehigh in mfg process	
Type of CCB	Type of CCB	Type of CCB	Type of CCB	
37,514 85,030 Volume of CCB, in Cubic Yards Yards Volume of CCB, in Cubic Yards Vo		14,805 Volume of CCB, in Cubic Yards	418,633 Volume of CCB, in Cubic Yards	
76,418.0 Weight of CCB, in Tons	57,395.0 Weight of CCB, in Tons	8,994.0 Weight of CCB, in Tons	395,608.0 Weight of CCB, in Tons	

Additional notes:

02-Jan-18

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Facility Name:	Heidelberg Materials	_ CCB Tonnage Report – 2023
	rned 293,915 short tons of co	oal with an ash content of approximately
		0
	ere performed by you or your co	ments, or both, conducted relating to the CCBs or ompany during the reporting year. Please attach
E. Copies of al this information		cal characterizations of the CCBs. Please attach
F. A descriptio	n of how you disposed of or use	ed your CCBs in calendar year 2017, identifying:
Paragraph C ab	ove) including any CCBs stored	osed of or used (if different than described in during the previous calendar year, the location of the type and volume of CCBs disposed of or used
	aterials utilizes fly ash and bo ment manufacturing process.	ttom ash along with synthetic gypsum in the See Attachments

02-Jan-18 TTY Users: 800-735-2258

Facility Name:	Heidelberg Materials	_ CCB Tonnage Report – 2023
and (b) The diff	ferent uses by type and volume of	of CCBs:
		cement manufacturing process. See
If the space pro	vided is insufficient, please attac	ch additional pages in a similar format.
G. A descriptio	n of how you intend to dispose	of or use CCBs in the next 5 years, identifying:
intended dispos		ided to be disposed of or used, the location of es, and the type and volume of CCBs intended to
	NA	
-		
and (b) The diffe	erent intended uses by type and	volume of CCBs.
	See att	ached
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02-Jan-18 TTY Users: 800-735-2258

Facility Name: Heidelberg Materials	CCB Tonnage Report – 2023
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<u>IV. Signature and Certification</u>. 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 Signature	Kurt W. Deery, REM Environmental Engineer, 410-386-1229 Name, Title, & Telephone No. (Print or Type) kurt.deery@Heidelbergmaterials.com Your Email Address	02/15/2024 Date		

V: Attachments (please list):

Manufacturing Description Quantities of ash and synthetic gypsum beneficially used in 2020				
Calculations sheet				

02-Jan-18

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Heidelberg Materials North America

Heidelberg Materials US Cement LLC/North

675 Quaker Hill Road Union Bridge, MD 21791 Phone (410) 386-1210

Attachment 1 Year 2023 CCB Reporting

Table 1: Fly Ash Totals

Fly Ash Suppplier	Supplier Location	Total Short Tons Delivered to Heidelberg Materials	Cubic Feet of Material*	Yards of Material
Raven Power	Baltimore, MD	294.00	13,067	484
RFI	Conemaugh	8,658.00	384,800	14,252
Talen	York Haven, PA	42.00	1,867	69
	Total	8,994.00	399,733	14,804.94

*Note: Fly ash = 45 lbs/cu. Ft as measured by Lehigh Lab

Table 2: Ponded Ash Totals

Bottom Ash Suppplier	Supplier Location	Total Short Tons Delivered to Heidelberg	Cubic Feet of Material*	Yards of Material
Paul Blum	Dickerson	Materials 208,348.00	5,952,800	220,474
Pual Blum	West Virginia	0.00	0	0
PPL	York Haven	187,260.00	5,350,286	198,159
	Total	395,608.00	11,303,086	418,632.80

*Note: Ponded Ash = 70 lbs/cu. Ft as measured by lehigh Lab

Table 3: Synthetic Gypsum

Table 5. Synthetic Gypsum				
Gypsum Suppplier	Supplier Location	Total Short Tons Delivered to Heidelberg Materials	Cubic Feet of Material*	Yards of Material
MERG	Mount Storm-WV	121,802.00	4,872,080	180,447
MERG	Dickerson, MD	0.00	0	0
RFI	Conemaugh	42,552.00	1,702,080	63,040
PB Company	Morgantown	0.00	0	0
PPL	Various Locals	0.00	0	-0
Total		164,354.00	6,574,160	243,487.41

*Note: Synthetic Gypsum = 50 lbs/cu. Ft as measured by Lehigh Lab





Attachment 1

Total short tons of CCBs used Year 2023 = 568,956.00

Total Yards of CCBs used Year 2023 = 21,072.4

Calculations

(Tons * 2000 lb/ton / lbs/cu ft) = cubic feet of material

Cubic Feet of material * (1 yard/ 3ft)³ = yards of material

Coal ash content is 26% Year 2023 coal use = 293,915 tons