

**Coal Combustion Byproducts (CCBs)  
Annual Generator Tonnage Report  
Instructions for Calendar Year 2025**

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 2025. 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 [andrew.grenzer@maryland.gov](mailto:andrew.grenzer@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

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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.

**I. Required Information.** The following information must be provided to MDE by March 1, 2026:

A. Contact information:

Facility Name: Brandon Shores Generating Station

Name of Permit Holder: Brandon Shores LLC

Facility Address: 2030 Brandon Shores Road  
Street

Facility Address: Baltimore MD 21226  
City State Zip

County: Anne Arundel

Contact Information (Person filing report or Environmental Manager)

Facility Telephone No.: 410-787-6928 Facility Fax No.: Not Applicable

Contact Name: Joshua Sawyers

Contact Title: Environmental Manager

Contact Address: 3000 Brandon Shores Road  
Street

Contact Address: Baltimore MD 21226  
City State Zip

Contact Email: joshua.sawyers@talenergy.com

Contact Telephone No.: 443-934-4990 Contact Fax No.: Not Applicable

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

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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:

Brandon Shores Generating Station consists of two coal fired units which produce electricity for commercial sale. Units are equipped with Babcock & Wilcox natural circulation radiant boilers. Bituminous coal is delivered by barge and stored in a pile adjacent to the plant. The coal is pulverized and fed by air to the boilers where it is burned using low NOx burners. Heavier bottom ash drops to the bottom of the boilers where it is conveyed by high-pressure water to settling bins before being loaded onto trucks for beneficial reuse or disposal. Lighter fly ash is conveyed by furnace air flow to electrostatic precipitators where the ash is collected on charged plates and falls into storage hoppers. Fly ash from the hoppers is conveyed pneumatically to storage silos before being trucked off site for beneficial reuse or disposal. High carbon fly ash is retained and re-burned as fuel in the boilers. Pulse jet fabric filters downstream of the precipitators remove remaining fly ash which has been mixed with powdered activated carbon and hydrated lime injected into the flue gas stream for emissions control. This fly ash is conveyed to storage silos for reuse or disposal. The wet flue gas desulfurization (FGD) scrubber produces CCBs including fly ash, gypsum, and FGD sludge. These CCBs are stored under cover before being loaded onto trucks for beneficial reuse or disposal. Wastewater fines are from CCB clean up or area wash downs and are sent to the settling basin at the internal wastewater treatment plant for storage. This basin is periodically de-watered and the CCBs are allowed to dry before being excavated, loaded on trucks, and sent for disposal.

C. The volume and weight of CCBs generated during calendar year 2025, 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 2025:** Please note that this table includes both the volume and weight of the types of CCBs your facility produces.

<b>Volume and Weight of CCBs Generated for Calendar Year 2025</b>				
Fly Ash	Bottom Ash	Gypsum	FGD Sludge	Wastewater Fines
Type of CCB	Type of CCB	Type of CCB	Type of CCB	Type of CCB
83,405	10,632	184,689	23,424	6,321
Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards	Volume of CCB, in Cubic Yards
61,928	7,894	137,132	17,392	4,693
Weight of CCB, in Tons	Weight of CCB, in Tons	Weight of CCB, in Tons	Weight of CCB, in Tons	Weight of CCB, in Tons

Additional notes: Coal combustion byproducts (CCBs) are reported in dry tons. Cubic yards are

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calculated using a conversion factor of 1 ton equals 1.3468 cubic yards (CY). The gypsum quantities above are adjusted by the amount stored (carried over) across reporting years. See notes for gypsum both beneficially reused and stored in Section F(a).

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.

No modeling or risk assessments were completed during 2025.

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

No chemical characterizations of CCBs were performed during 2025.

F. A description of how you disposed of or used your CCBs in calendar year 2025, 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:

**Fly Ash – Beneficial Reuse**

48,556 tons (65,395 CY) of fly ash was received by Separation Technologies in Baltimore, MD for use in concrete.

7,498 tons (10,098 CY) of fly ash was received by Heidelberg Materials in Union Bridge, MD for cement manufacturing.

**Fly Ash - Disposal**

5,874 tons (7,911 CY) of fly ash was delivered to Fort Armistead – Lot 15 Landfill in Baltimore, MD for landfilling.

**Bottom Ash - Beneficial Reuse**

7,894 tons (10,632 CY) of bottom ash was received by the Fort Armistead - Lot 15 Landfill in Baltimore, MD for drainage/protective layer above the liner.

**Gypsum - Beneficial Reuse**

45,629 tons (61,453 CY) received by USG in Baltimore, MD for use in wallboard manufacturing.

91,653 tons (123,438 CY) received by USG in Danville, PA for use in wallboard manufacturing.

Note that the quantity of beneficially reused gypsum includes 150 tons generated in 2024 that was stored, shipped, and reused in 2025. The amount stored is subtracted or added to the generated amount in Table I depending on if the gypsum inventory decreased or increased year over year.

**Gypsum - Disposal**

0 tons (0 CY) of gypsum was disposed of.

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**Gypsum - Storage**

500 tons (673 CY) of gypsum was stored on site at the end of 2024.

350 tons (471 CY) of gypsum was stored on site at the end of 2025. Note that the difference in gypsum stored at the end of 2024 and 2025 (-150 tons/202 CY) is included in gypsum generated in 2025 (Table I).

**FGD Sludge - Disposal**

17,392 tons (23,424 CY) of FGD sludge was delivered to Fort Armistead Road - Lot 15 landfill in Baltimore, MD for landfilling.

**Wastewater Fines - Disposal**

4,693 tons (6,321 CY) of wastewater fines was delivered to the Fort Armistead – Lot 15 Landfill in Baltimore, MD for landfilling.

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

**Fly Ash**

56,054 tons (75,493 CY) of fly ash was used in cement /concrete manufacturing.

**Bottom Ash**

7,894 tons (10,632 CY) of bottom ash was used as drainage/protective layer above a landfill liner.

**Gypsum**

137,282 tons (184,891 CY) of gypsum was used in wallboard manufacturing. See notes in Section F(a).

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:

Brandon Shores Generating Station will cease burning coal by 2029; therefore, the projections are limited to the next four years.

**Fly Ash**

The facility projects that as much as 25,000 tons (33,670 CY) of fly ash will be generated each year for the next four years. Approximately 22,500 tons (30,303 CY) of fly ash will be beneficially used in cement products and the remaining 2,500 tons (3,367 CY) will be disposed of in the Fort Armistead Road – Lot 15 Landfill in Baltimore, MD.

**Bottom Ash**

The facility projects that as much as 5,000 tons (6,734 CY) of bottom ash will be generated each year for the next four years, all of which will be beneficially used as drainage/protective layer above the liner in the Fort Armistead Road – Lot 15 landfill in Baltimore, MD.

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**Gypsum**

The facility projects that as much as 50,000 tons (67,340 CY) of gypsum will be generated each year for the next four years, all of which will be beneficially used in wallboard.

**FGD Sludge**

The facility projects that as much as 5,000 tons (6,734 CY) of FGD sludge will be generated each year for the next four years, all of which will be disposed of in the Fort Armistead Road - Lot 15 Landfill in Baltimore, MD.

**Wastewater Fines**

The facility projects that as much as 5,000 tons (6,734 CY) of wastewater fines will be generated each year for the next four years, all of which will be disposed of in the Fort Armistead Road - Lot 15 Landfill in Baltimore, MD.

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

**Fly Ash**

Approximately 22,500 tons (30,303 CY) of fly ash each year will be beneficially used in the manufacturing of cement.

**Bottom Ash**


Approximately 5,000 tons (6,734 CY) of bottom ash each year will be beneficially used as drainage/protective layer above a landfill liner.

**Gypsum**

Approximately 50,000 tons (67,340 CY) of gypsum each year will be beneficially used in wallboard and cement.

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

**II. 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	Thomas Clisham Senior Director-Asset Management 717-266-7510 Name, Title, & Telephone No. (Print or Type)  thomas.clisham@talenergy.com Your Email Address	2/24/2024 Date

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

None.