

**BASIC APPLICATION FOR EQUIPMENT / AIR POLLUTION PERMIT
OR CERTIFICATE OF OPERATION**

**FORM E001
03/2011**

1. Name of Company American Materials Technologies, LLC a wholly
(If corporation or LLC, name on file with Tennessee Secretary of State Corporate Records Division)
2. NAICS Code: 212312
3. Company Official to Contact: Will Rasmussen
4. Phone No. 678-965-8581
5. Mailing Address: 1725 Windward Concourse, Ste 300 Alpharetta GA 30005
Street or P.O. Box City State Zip Code
6. Physical Location
(If different from line 5) 2 Pelican Drive Chattanooga TN 37416
Street City State Zip Code
7. Application for:
☒ Installation Permit ☐ Initial Certificate of Operation ☐ Renewal Certificate of Operation
- Previous Installation Permit or Certificate of Operation No.: _____
8. Type of equipment for which application is made:
- | | | |
|---|---|--|
| <input checked="" type="checkbox"/> Process Equipment (Form E010 or Form E010A) | <input type="checkbox"/> Previously Submitted | <input checked="" type="checkbox"/> Attached |
| <input type="checkbox"/> Fuel Burning Equipment (Form E011) | <input type="checkbox"/> Previously Submitted | <input type="checkbox"/> Attached |
| <input type="checkbox"/> Incineration Equipment (Form E012) | <input type="checkbox"/> Previously Submitted | <input type="checkbox"/> Attached |
| <input type="checkbox"/> Minor Pollution Source (Form E014)
<i>(Less than 1000 lbs/yr and less than 10 lbs/day total uncontrolled contaminant emissions)</i> | <input type="checkbox"/> Previously Submitted | <input type="checkbox"/> Attached |

The following forms are filed with this application:

9. Equipment Name:
Trommel Screen System
10. If application is for a Certificate of Operation (Initial or Renewal), are there any changes since previous application in the equipment or operation which might:
- A. Increase, decrease, or alter process materials, fuel, refuse type, etc.? ☒ Yes ☐ No
- B. Increase, decrease, or alter emissions or emission points? ☒ Yes ☐ No
11. Process Weight, lb/hr, (Item 6 on Form E010), Incineration Rate, lb/hr, (Item 3C on Form E012), or Fuel Burning Rate, 1,000 Btu/hr, (Item 7C on Form E011): 500 TPH

This is to certify that I am familiar with operations concerning this equipment and the information provided on this application is true and complete to the best of my knowledge:

Mail completed form to:
CHATTANOOGA-HAMILTON COUNTY
AIR POLLUTION CONTROL BUREAU
2034 Hamilton Place Blvd., Suite 300
Chattanooga, TN 37421

This form must be completely filled out before it will be processed

William Rasmussen

Digitally signed by William Rasmussen
Date: 2025.03.27 14:29:31 -04'00'

Name

Sr. Environmental Engineer

Title

March 27th 2025

Date

Received

APR 02 2025

Chattanooga-Hamilton County
Air Pollution Control Bureau

PROCESS EQUIPMENT APPLICATION

FORM E010
07/2000

1. **Name of Company** (as shown on Line 1, Form E001): American Materials Technologies, LLC a wholly owned
2. **Equipment Name** (as shown on Line 10, Form E001): Trommel *Screen System*
3. **Installation Date:** February 2025 4. **Type of Process:** Overburden Screening
5. **Major Raw Materials Used:** Rock and Soil
6. **Process Weight:** 500 TPH or 1,000,000 Pounds per hour
This is the total weight of all materials introduced into the process.

7. **Control Equipment**

- ☐ Emissions Uncontrolled ☐ Baghouse (File Form E102)
- ☐ Wet Collecting Device (File Form E103) ☐ Inertial Separators (File Form E105)
- ☐ Electrostatic Precipitator (File Form E104) ☒ Other – Specify: See Attached Spreadsheet

8. **Control Efficiency**

Enter the control efficiency for each pollutant emitted by this equipment (for appropriate Forms E102, E103, E104, E105, E107, or enter zeros if the emissions are uncontrolled as noted in Item 7.

Pollutant	% Efficiency
Particulates	See Attached Spreadsheet
SO _x	See Attached Spreadsheet
NO _x	See Attached Spreadsheet
CO	See Attached Spreadsheet
Hydrocarbons	See Attached Spreadsheet
Other:	

9. **Emissions Summary**

Enter the amount of each pollutant listed in pounds per hour.

Pollutant	Uncontrolled Emissions (File Form E106)	Actual Emissions (Stack Test Report)	Estimated Emissions (See Formula A)
Total Suspended Particulate			See Attached Spreadsheet
PM10			See Attached Spreadsheet
Sulfur Oxides			See Attached Spreadsheet
Nitrogen Oxides (as NO ₂)			See Attached Spreadsheet
Other (specify)			

OR

Formula A: Estimated Emissions = $\frac{(100\% - \text{Control Efficiency} (\%))}{100\%}$ X Uncontrolled Emissions

10. **Environmental Impact**

Those emissions indicated in Item 9 may at times under normal operating conditions cause (check all that apply):

- ☐ Odors ☐ Eye Irritations ☐ Property Damage ☐ Health Effects
☐ Other nuisances outside of plant property ☒ No environmental damage

11. **Emission Point Data**

Stack Height (emission point) above ground: N/A Ft. Volume of gas discharged into atmosphere: N/A cfm
Ground Elevation above sea level at stack base: N/A Ft. Gas exit temperature: N/A °F
Stack Diameter: N/A Ft.

12. **Ave. Operating Time**

Daily: 12 hours Weekly: 6 Days Yearly: 50 Weeks

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Air Pollution Control Bureau

William Rasmussen

Company Official

Sr. Environmental Engineer

Title

March 27, 2025

Date

Total PM emission factors -
conveyor transfer point (controlled): 9.00014 lb/ton
screening (controlled): 0.0022 lb/ton

Code	Source	Manufacturer	Date	Size	Suppression System	Rate (TPH)	Factor (lbs./Ton)	Emission (Lb/Hr)
TF1	Feed Hopper	MDS	2024	14' x 6'	Water Spray	500	0.000046	0.0230
TS1	Screen	MDS	2024	4' x 18'	Water Spray	500	0.000740	0.3700
TC1	Fines Conveyor	MDS	2024	37" x 13' 4"	Carry Over	150	0.000046	0.0069
TC2	Mid Prod Conveyor	MDS	2024	39" x 12' 2"	Carry Over	200	0.000046	0.0092
TC3	Oversize Conveyor	MDS	2024	47" x 12' 10"	Carry Over	150	0.000046	0.0069
Total Plant Equipment Potential PM-10 Emissions (Source of Emission Factor : AP-42 Section 11.19.2-2)								
							lbs/hr tons/yr	0.416 0.749

3,600
Based on 864 hrs/yr

Code	Source	Manufacturer	Date	Size (bkW)	Emission Control	Nox Emission Factor (g/kWh)	NMHC Emission Factor (g/kWh)	PM Emission Factor (g/kWh)
TE1	CAT 4.4 T3 Engine	CAT	2024	(96.2)	Diesel Oxidation Catalyst	3.50	0.50	0.30
Total Plant Equipment Potential Emissions (Source of Emission Factor : Tier 3 Emission Standards)								
Nox lbs/hr NMHC lbs/hr PM lbs/hr Nox tons/yr NMHC tons/yr PM tons/yr								
0.74 0.11 0.06 1.34 0.19 0.11								

below permit threshold

3,600
864 hrs/yr based on 12 hours a day, 6 days a week, for 12 Months (50 weeks).

*It's assumed that the 500 tons production could be split any way between the three output conveyors, as their emission factors are the same.

(Source of Emission Factor : Tier 3 Emission Standards)

Based on 3600 hrs/yr

Total PM 1b/hr
 Feed hopper: 0.070
 Trommel screen: 1.100
 3 conveyors: 0.070
 1,240
 potential @ 1,500,000 tons/yr
 tons/yr
 0.105
 1.650
 0.105
 1,860

Received

APR 02 2025

Chattanooga-Hamilton County
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MDS M515

The M515 is the perfect machine for processing the largest of rocks, up to 600mm (24") in size. Typical applications would be rip-rap, armour rock and quarry construction.

The M515 is the flagship model in the MDS range that comes complete with 4000mm (165") high conveyor and built-in hydraulic jacking legs to raise the machine to a convenient working position and level for operation.

Transport Dimensions

Length: 12.0m (39' 6")
Width: 3.0m (9' 8")
Height: 3.84m (12' 6") w/2nd
Height: 3.20m (10' 6") w/1st

Discharge Heights

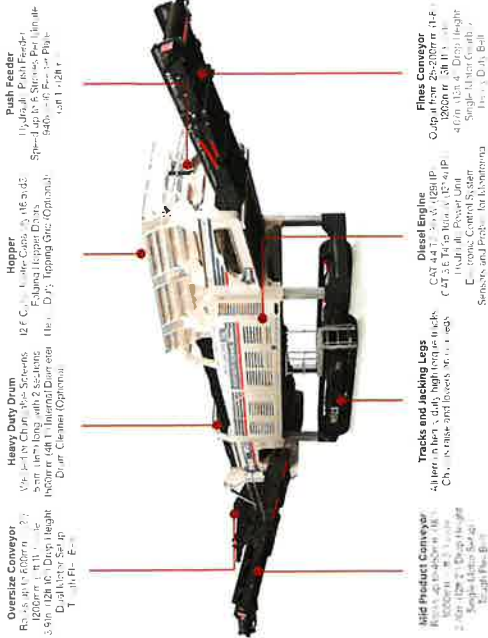
Fines: 1.6m (5' 3")
Mid Product: 2.1m (6' 9")
Over Size: 2.7m (8' 10") to 3.0m (9' 8")

Output

Capacity: Up to 500 tonnes per hour
Run to 300 (30' long)

Options

Over-Size Hopping (400' Adjustable)
Additional Conveyor Quenching
Wireless Remote



DRUMS & SCREENS

The M515 binnet is a versatile unit and can be used in different applications. MDS offers different drum options to cater for the needs of the customers. Drum frame with changeable screens and fully welded drums are available as options.

Drum chambers only work with fully welded drums and in the fines section.

Fully welded options are 75mm (3") x 30mm (1 1/4"), 75mm (3") x 15mm (1/2"), and 150mm (6").

Drum frame with changeable screens is recommended for free-flowing or abrasive applications.

MDS 515 binnets are made up of a drum with a 4m fines section and 1.5m Mid Product Section. There are various combinations of drums that can be set up on the machine. These are other frames with changeable screens or fully welded drums. The exact configuration depends on the application and requirements of the customer.

Fully welded drum on the fines section is needed if installing a drum cleaner. For sizes bigger than 300mm (12") fully welded drum is needed in Mid Product (Max drum size 425mm (16 3/4").



MDS

AP-42

Table 11.19.2-2 (English Units). EMISSION FACTORS FOR CRUSHED STONE PROCESSING OPERATIONS (lb/Ton)^a

Source ^b	Total Particulate Matter ^{r,s}	EMISSION FACTOR RATING	Total PM-10	EMISSION FACTOR RATING	Total PM-2.5	EMISSION FACTOR RATING
Primary Crushing (SCC 3-05-020-01)	ND		ND ⁿ		ND ⁿ	
Primary Crushing (controlled) (SCC 3-05-020-01)	ND		ND ⁿ		ND ⁿ	
Secondary Crushing (SCC 3-05-020-02)	ND		ND ⁿ		ND ⁿ	
Secondary Crushing (controlled) (SCC 3-05-020-02)	ND		ND ⁿ		ND ⁿ	
Tertiary Crushing (SCC 3-050030-03)	0.0054 ^d	E	0.0024 ^o	C	ND ⁿ	
Tertiary Crushing (controlled) (SCC 3-05-020-03)	0.0012 ^d	E	0.00054 ^p	C	0.00010 ^q	E
Fines Crushing (SCC 3-05-020-05)	0.0390 ^c	E	0.0150 ^e	E	ND	
Fines Crushing (controlled) (SCC 3-05-020-05)	0.0030 ^f	E	0.0012 ^f	E	0.000070 ^q	E
Screening (SCC 3-05-020-02, 03)	0.025 ^c	E	0.0087 ^l	C	ND	
Screening (controlled) (SCC 3-05-020-02, 03)	0.0022 ^d	E	0.00074 ^m	C	0.000050 ^q	E
Fines Screening (SCC 3-05-020-21)	0.30 ^g	E	0.072 ^g	E	ND	
Fines Screening (controlled) (SCC 3-05-020-21)	0.0036 ^g	E	0.0022 ^g	E	ND	
Conveyor Transfer Point (SCC 3-05-020-06)	0.0030 ^h	E	0.00110 ^h	D	ND	
Conveyor Transfer Point (controlled) (SCC 3-05-020-06)	0.00014 ⁱ	E	4.6 x 10 ^{-5j}	D	1.3 x 10 ^{-5q}	E
Wet Drilling - Unfragmented Stone (SCC 3-05-020-10)	ND		8.0 x 10 ^{-5j}	E	ND	
Truck Unloading -Fragmented Stone (SCC 3-05-020-31)	ND		1.6 x 10 ^{-5j}	E	ND	
Truck Loading - Conveyor, crushed stone (SCC 3-05-020-32)	ND		0.00010 ^k	E	ND	

a. Emission factors represent uncontrolled emissions unless noted. Emission factors in lb/Ton of material of throughput. SCC = Source Classification Code. ND = No data.

b. Controlled sources (with wet suppression) are those that are part of the processing plant that employs current wet suppression technology similar to the study group. The moisture content of the study group without wet suppression systems operating (uncontrolled) ranged from 0.21 to 1.3 percent, and the same facilities operating wet suppression systems (controlled) ranged from 0.55 to 2.88 percent. Due to carry over of the small amount of moisture required, it has been shown that each source, with the exception of crushers, does not need to employ direct water sprays. Although the moisture content was the only variable measured, other process features may have as much influence on emissions from a given source. Visual observations from each source under normal operating conditions are probably the best indicator of which emission factor is most appropriate. Plants that employ substandard control measures as indicated by visual observations should use the uncontrolled factor with an appropriate control efficiency that best reflects the effectiveness of the controls employed.

c. References 1, 3, 7, and 8

d. References 3, 7, and 8