SRM CONCRETE

SMYRNA READY MIX CONCRETE, LLC
1000 HOLLINGSHEAD CIRCLE
MURFREESBORO, TN 37129
OFFICE 615-355-1028 FAX 615-242-3064

January 27, 2025

Chattanooga-Hamilton County Air Pollution Control Bureau
CBL Center II
2034 Hamilton Place Blvd., Suite 300
Chattanooga, TN 37421

Air permit

To whom it may Concern,
Smyrna Ready Mix Materials would like to file for an operating Air Permit for the Cement Storage Dome, that is located at 1400 West 37th Street Chattanooga TN, 37407. At this location Dry Cement Powder will be offloaded from Rail cars, stored in a Dome and then transferred to Trucks for delivery. I have attached completed forms E001, E010, E102, Flow Diagram and Emissions sheets for each of the Emission Points.

I hope this information is in order, if there is anything I can be assistance with I can be reached at (615) 642-3714.

Sincerely,

Scott Grazier

Scott Grazier
Environmental Director
Scott.grazier@smyrnareadymix.com

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

FORM E001
03/2011

1. Name of Company: Smyrna Ready Mix Concrete, LLC
   (If corporation or LLC, name on file with Tennessee Secretary of State Corporate Records Division)
2. NAICS Code: 327390
3. Company Official to Contact: Scott Grazier
4. Phone No. 615-642-3714
5. Mailing Address: 1000 Holliqshead Circle (*Street or P.O. Box*) Murfreesboro (*City*) TN (*State*) 37129 (*Zip Code*)
6. Physical Location (If different from line 5): 1400 west 37th Street (*Street*) Chattanooga (*City*) TN (*State*) 37407 (*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:

☑ Process Equipment (Form E010 or Form E010A)	☐ Previously Submitted	☑ Attached
☐ Fuel Burning Equipment (Form E011)	☐ Previously Submitted	☐ Attached
☐ Incineration Equipment (Form E012)	☐ Previously Submitted	☐ Attached
☐ Minor Pollution Source (Form E014) *(Less than 1000 lbs/yr and less than 10 lbs/day total uncontrolled contaminant emissions)*	☐ Previously Submitted	☐ Attached

RECEIVED
MAY 22 2025
Chattanooga-Hamilton County Air Pollution Control Bureau

The following forms are filed with this application:
E010, E012

9. Equipment Name:
   Cement Dome storage Silo Truck Loading
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): 310 Tons

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

Scott Grazier — *Name*
Environmental Director — *Title*
5/22/2025 — *Date*

CHATTANOOGA-HAMILTON COUNTY AIR POLLUTION CONTROL BUREAU
2034 Hamilton Place Blvd., Suite 300, Chattanooga, TN 37421-6127

EP-001

PROCESS EQUIPMENT APPLICATION

FORM E010
07/2000

1. ***Name of Company*** (as shown on Line 1, Form E001): Hollingshead Materials, LLC

2. ***Equipment Name*** (as shown on Line 10, Form E001): Vacupac Aervent

3. ***Installation Date***: 11/1/2024

4. ***Type of Process***: Vent

5. ***Major Raw Materials Used***: Dry Cement Powder

6. ***Process Weight***: 880,000 at maximum capacity 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: _____

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	99%+ @ 1-2μm
SO_x	
NO_x	
CO	
Hydrocarbons	
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				
PM10		0.23		
Sulfur Oxides			OR	
Nitrogen Oxides (as NO_2)				
Other (specify)				

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

CHATTANOOGA-HAMILTON COUNTY AIR POLLUTION CONTROL BUREAU
2034 Hamilton Place Blvd., Suite 300, Chattanooga, TN 37421-6127

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: 29.0 Ft.
Ground Elevation above sea level at stack base: 655 Ft.
Stack Diameter: 1'5/8" Ft.
Volume of gas discharged into atmosphere: 800 cfm
Gas exit temperature: ambient °F

12. ***Ave. Operating Time***

Daily: 24 hours Weekly: 6 Days Yearly: 52 Weeks

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

Company Official

CEO
Title

January 27, 2025
Date

EP-001

AIR POLLUTION CONTROL EQUIPMENT DATA - BAGHOUSE

FORM E102 01/2001

1. **Name of Company:** Hollingshead Materials, LLC
   As shown on Line 1 of Form E001

2. **Name of Equipment:** Vacupac Aervent EP-001
   As shown on Line 9 of Form E001

3. **Equipment Data:**
   Manufacturer of Baghouse: Midwest International
   Model Number: MAV10552 Cost of Baghouse: _____
   Date of Manufacture: 2024 Date of Installation: 11/1/2024
   Pre-cleaning Equipment ■ No ☐ Yes _____
   If yes, what type (File appropriate form for control equipment)
   Volume of gas discharged from baghouse at dry standard conditions: 800 dscfm
   Total cloth area of baghouse: 248 ft^2
   Air to cloth ratio: 3.2:1 Ft/Min *(Divide volume of gas discharged by total cloth area)*

4. **Pressure Drop Across Baghouse:**
   Stated by manufacturer: 3-5 Inches of H_2O
   Measured (actual): _____ Inches of H_2O
   Calculated: _____ *(K Factor)* X _____ *Air to cloth ratio in ft/min* = _____ Inches of H_2O
   The recommended pressure drop range in inches of H_2O is 1.5 (minimum) to 8.0 (maximum).
   If the measured or calculated pressure drop falls outside the recommended range, contact the Chattanooga-Hamilton County Air Pollution Control Bureau.

5. **Filter Data:**
   Type of fabric filters used in baghouse: spunbond Polyester
   Operating temperature: Ambient °F *Manufacturer's Recommended* Ambient °F *Normal* 275 °F *Maximum*
   If the maximum operating temperature exceeds the recommended operating temperature, contact the Chattanooga-Hamilton County Air Pollution Control Bureau.

6. **Baghouse Components:**
   Check all that apply.
   ☐ Flow rate instrumentation ☐ Inlet gas temperature instrumentation ☐ Evaporative Cooler
   ☐ Dew point indicator ■ Differential pressure instrumentation ☐ Other (Describe) _____
   ☐ Heat Exchanger ☐ Transmissometer

7. **Baghouse Operation:**
   ■ Continuous ☐ Intermittent

8. **Baghouse Description:**

Baghouse Inlet (dirty gas): ■ Bottom Feed ☐ Top Feed

☐ Exterior Filtration ☐ Tangential

☐ Other (Describe): _____

Does the baghouse have a wear-resistant plate? ☐ yes ☐ no

Baghouse shape: ■ Rectangular ☐ Cubical ☐ Cylindrical

☐ Other (Describe): _____

Baghouse volume: _____ Ft^3

Baghouse dimensions: 5 Ft (*Length*) 1'6" Ft (*Width*) 2'8" Ft (*height*)

Baghouse shell material: Carbon Steel

8. **Bag Cleaning:** *(check one)*

Fabric Flexing	Reverse Air Cleaning
☐ Mechanical Shaking & Rapping	■ Reverse Jet
☐ Sonic Cleaning	☐ Reverse Flow
☐ Collapse Cleaning	☐ Manual Cleaning
☐ Pulse (pressure) – Jet Cleaning	

9. **Filter Configuration:**

☐ Panels ☐ Multiple Tube Bag

■ Circular Cross-Section Tube ☐ Other (Describe): _____

Filter Fabric: ☐ Felted ■ Woven Number of Compartments: 4

Filter Area: 248 Ft^2 Number of Filters per Compartment: 1

10. **Particle Size Distribution in Microns (µ):**

Particle Type(s): _____ Moisture in gas stream: _____ %

Size	0-5µ	5-10µ	10-20µ	20-44µ	Greater than 44µ
% by weight	99%+				

11. **Dust Disposal:**

■ Automatic (screw conveyor, etc.) ☐ Manual (Describe): _____

How often are hoppers emptied? Every _____ hours

Name of commercial disposal company (if applicable): _____

Is disposed material wetted for transport? ☐ Yes ☐ No

Disposal Site: Product is captured and reused

12. **Control Efficiency:**

Manufacturer's Stated Efficiency: 99%+ %

Required Efficiency: _____ %

Operational Efficiency (performance testing): _____ %

Size	0-5μ	5-10μ	10-20μ	20-44μ	Greater than 44μ
% by weight	99%+				

13. **Fan Data:**

Fan Location: ☒ Clean air side (pull through) ☐ Dirty air side (push through)

Fan Design *(check one – A, B, or C)*:

Fan Type:	Blade Type:
A. ☒ Centrifugal (radial flow)	☐ Forward Curve ☐ Backward Curve ☒ Straight
B. ☐ Axial-flow (propeller)	☐ Propeller ☐ Tube Axial ☐ Vane Axial

Fan Properties:

Diameter:	10.625	Inches	Braking Horsepower:	1.70	BHP
Speed:	3450	RPM	Inlet Area:	.50	Ft^2
Volume:	800	Cfm @ STP	Outlet Area:	0.2500	Ft^2
Static Pressure:	.075	Inches WC	Motor Horsepower:	2	HP

☐ Standard ☐ Heavy Duty Submitted copy of Manufacturer's Multirating Tables ☐ Yes ☐ No

Special Construction Materials:

☐ Bronze Alloys ☒ Aluminum ☐ Stainless Steel ☐ Bisonite

☐ Zinc Chromate Primer ☐ Rubber, Phenolics, Vinyls, or Epoxy Covering

C. ☒ Compressor	☐ Positive Displacement ☐ Dynamic ☒ Reciprocating

This is to certify that I am familiar with the operations concerning this equipment and that the information provided on this application is true and complete to the best of my knowledge. ***This form must be completely filled out before it will be processed.***

Company Official: Jeff Keller
Signature

Title: CEO

Date: 1/27/25

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

Do not write below this line.

_____ Engineer Approval Permit Number: _____

Special Notations: _____

CHATTANOOGA-HAMILTON COUNTY AIR POLLUTION CONTROL BUREAU
2034 Hamilton Place Blvd., Suite 300, Chattanooga, TN 37421-6127

1
EP-002

PROCESS EQUIPMENT APPLICATION

FORM E010
07/2000

1. ***Name of Company*** (as shown on Line 1, Form E001): Hollingshead Materials, LLC

2. ***Equipment Name*** (as shown on Line 10, Form E001): DCL BV144-100 Bin Vent

3. ***Installation Date:*** 10/23/24 4. ***Type of Process:*** Dome Dust Collector

5. ***Major Raw Materials Used:*** Dry Cement Powder

6. ***Process Weight:*** 880,000 at maximum capacity 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: _____

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	99.95 @ 2.50 Micron & Larger
SO_x	
NO_x	
CO	
Hydrocarbons	
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				
PM10		0.5786		
Sulfur Oxides			OR	
Nitrogen Oxides (as NO_2)				
Other (specify)				

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

CHATTANOOGA-HAMILTON COUNTY AIR POLLUTION CONTROL BUREAU
2034 Hamilton Place Blvd., Suite 300, Chattanooga, TN 37421-6127

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: 135.5 Ft.
Ground Elevation above sea level at stack base: 658 Ft.
Stack Diameter: 1'8" Ft.
Volume of gas discharged into atmosphere: 9,000 cfm
Gas exit temperature: ambient °F

12. ***Ave. Operating Time***

Daily: 24 hours Weekly: 6 Days Yearly: 52 Weeks

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

Company Official

CEO
Title

January 27, 2025
Date

EP-002

AIR POLLUTION CONTROL EQUIPMENT DATA - BAGHOUSE

FORM E102 01/2001

1. **Name of Company:** Hollingshead Materials, LLC
   As shown on Line 1 of Form E001

2. **Name of Equipment:** DCL BV144-100 Bin Vent
   As shown on Line 9 of Form E001

3. **Equipment Data:**
   Manufacturer of Baghouse: DCL

   Model Number: BV144-100 Cost of Baghouse: $67,745

   Date of Manufacture: 2024 Date of Installation: 11/1/2024

   Pre-cleaning Equipment ■ No ☐ Yes _____
   If yes, what type (File appropriate form for control equipment)

   Volume of gas discharged from baghouse at dry standard conditions: 9,000 dscfm

   Total cloth area of baghouse: 1,728 ft^2

   Air to cloth ratio: 5.20:1 Ft/Min *(Divide volume of gas discharged by total cloth area)*

4. **Pressure Drop Across Baghouse:**
   Stated by manufacturer: 3-5 Inches of H_2O

   Measured (actual): _____ Inches of H_2O

   Calculated: _____ (K Factor) X _____ Air to cloth ratio in ft/min = _____ Inches of H_2O

   The recommended pressure drop range in inches of H_2O is 1.5 (minimum) to 8.0 (maximum).

   If the measured or calculated pressure drop falls outside the recommended range, contact the Chattanooga-Hamilton County Air Pollution Control Bureau.

5. **Filter Data:**
   Type of fabric filters used in baghouse: Polypropylene Singed Bags

   Operating temperature: Ambient °F (*Manufacturer's Recommended*) Ambient °F (*Normal*) Ambient °F (*Maximum*)

   If the maximum operating temperature exceeds the recommended operating temperature, contact the Chattanooga-Hamilton County Air Pollution Control Bureau.

6. **Baghouse Components:**
   Check all that apply.

   ☐ Flow rate instrumentation ☐ Inlet gas temperature instrumentation ☐ Evaporative Cooler

   ☐ Dew point indicator ■ Differential pressure instrumentation ☐ Other (Describe) _____

   ☐ Heat Exchanger ☐ Transmissometer

7. **Baghouse Operation:**
   ■ Continuous ☐ Intermittent

8. **Baghouse Description:**

Baghouse Inlet (dirty gas): ■ Bottom Feed ☐ Top Feed

☐ Exterior Filtration ☐ Tangential

☐ Other (Describe): _____

Does the baghouse have a wear-resistant plate? ☐ yes ☐ no

Baghouse shape: ☐ Rectangular ■ Cubical ☐ Cylindrical

☐ Other (Describe): _____

Baghouse volume: 576 Ft^3

Baghouse dimensions: 8 *Length* Ft 8 *Width* Ft 9 *height* Ft

Baghouse shell material: Carbon Steel

8. **Bag Cleaning:** *(check one)*

Fabric Flexing	Reverse Air Cleaning
☐ Mechanical Shaking & Rapping	■ Reverse Jet
☐ Sonic Cleaning	☐ Reverse Flow
☐ Collapse Cleaning	☐ Manual Cleaning
☐ Pulse (pressure) – Jet Cleaning	

9. **Filter Configuration:**

☐ Panels ■ Multiple Tube Bag

☐ Circular Cross-Section Tube ☐ Other (Describe): _____

Filter Fabric: ■ Felted ☐ Woven Number of Compartments: 1

Filter Area: 1728 Ft^2 Number of Filters per Compartment: 12

10. **Particle Size Distribution in Microns (μ):**

Particle Type(s): Dry Cement Powder Moisture in gas stream: _____ %

Size	0-5μ	5-10μ	10-20μ	20-44μ	Greater than 44μ
% by weight	99.95%				

11. **Dust Disposal:**

■ Automatic (screw conveyor, etc.) ☐ Manual (Describe): _____

How often are hoppers emptied? Every _____ hours

Name of commercial disposal company (if applicable): _____

Is disposed material wetted for transport? ☐ Yes ☐ No

Disposal Site: Powder is reclaimed

12. **Control Efficiency:**

Manufacturer's Stated Efficiency: 99.95 %

Required Efficiency: _____ %

Operational Efficiency (performance testing): _____ %

Size	0-5μ	5-10μ	10-20μ	20-44μ	Greater than 44μ
% by weight	99.95				

13. **Fan Data:**

Fan Location: ☒ Clean air side (pull through) ☐ Dirty air side (push through)

Fan Design *(check one – A, B, or C)*:

Fan Type:	Blade Type:
A. ☒ Centrifugal (radial flow)	☐ Forward Curve ☐ Backward Curve ☒ Straight
B. ☐ Axial-flow (propeller)	☐ Propeller ☐ Tube Axial ☐ Vane Axial

Fan Properties:

Diameter:	36	Inches	Braking Horsepower:	21	BHP
Speed:	1245	RPM	Inlet Area:	2.000	Ft^2
Volume:		Cfm @ STP	Outlet Area:	2.7778	Ft^2
Static Pressure:	10	Inches WC	Motor Horsepower:	25	HP

☐ Standard ☒ Heavy Duty Submitted copy of Manufacturer's Multirating Tables ☐ Yes ☐ No

Special Construction Materials:

☐ Bronze Alloys ☐ Aluminum ☒ Stainless Steel ☐ Bisonite

☐ Zinc Chromate Primer ☐ Rubber, Phenolics, Vinyls, or Epoxy Covering

C. ☐ Compressor	☐ Positive Displacement	☐ Dynamic	☒ Reciprocating

This is to certify that I am familiar with the operations concerning this equipment and that the information provided on this application is true and complete to the best of my knowledge. ***This form must be completely filled out before it will be processed.***

Company Official: Jeff Hollis
Signature

Title: CEO

Date: 1/27/2025

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

Do not write below this line.

_____ Engineer Approval Permit Number: _____

Special Notations: _____

CHATTANOOGA-HAMILTON COUNTY AIR POLLUTION CONTROL BUREAU
2034 Hamilton Place Blvd., Suite 300, Chattanooga, TN 37421-6127

1

EP-003

PROCESS EQUIPMENT APPLICATION

FORM E010
07/2000

1. ***Name of Company*** (as shown on Line 1, Form E001): Hollingshead Materials, LLC

2. ***Equipment Name*** (as shown on Line 10, Form E001): CPE Filters Inc. Dust Collector

3. ***Installation Date***: 11/1/2024 4. ***Type of Process***: Dust Collector

5. ***Major Raw Materials Used***: Dry Cement Powder

6. ***Process Weight***: 880,000 at maximum capacity 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: _____

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	100.00% @ 0.55 Micron & Lgr.
SO_x	
NO_x	
CO	
Hydrocarbons	
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				
PM10		0.1607		
Sulfur Oxides			OR	
Nitrogen Oxides (as NO_2)				
Other (specify)				

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

CHATTANOOGA-HAMILTON COUNTY AIR POLLUTION CONTROL BUREAU
2034 Hamilton Place Blvd., Suite 300, Chattanooga, TN 37421-6127

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: 16.5 Ft.
Ground Elevation above sea level at stack base: 658 Ft.
Stack Diameter: 1' Ft.
Volume of gas discharged into atmosphere: 2,500 cfm
Gas exit temperature: ambient °F

12. ***Ave. Operating Time***

Daily: 24 hours Weekly: 6 Days Yearly: 52 Weeks

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

Jeff Holla
Company Official

CEO
Title

January 27, 2025
Date

EP-003

AIR POLLUTION CONTROL EQUIPMENT DATA - BAGHOUSE

FORM E102
01/2001

1. **Name of Company:** Hollingshead Materials, LLC
As shown on Line 1 of Form E001

2. **Name of Equipment:** CPE Filters Inc. Dust Collector
As shown on Line 9 of Form E001

3. **Equipment Data:**
Manufacturer of Baghouse: CPE Filters Inc.

Model Number: 100-TNFD-049-c Cost of Baghouse: $27,000

Date of Manufacture: 2024 Date of Installation: 11/1/2024

Pre-cleaning Equipment ■ No ☐ Yes _____
If yes, what type (File appropriate form for control equipment)

Volume of gas discharged from baghouse at dry standard conditions: 2,500 dscfm

Total cloth area of baghouse: 629 ft^2

Air to cloth ratio: 3.98:1 $\frac{Ft}{Min}$ *(Divide volume of gas discharged by total cloth area)*

4. **Pressure Drop Across Baghouse:**
Stated by manufacturer: 3-5 Inches of H_2O

Measured (actual): - 8 Inches of H_2O

Calculated: _____ X _____ = _____ Inches of H_2O
(K Factor) *Air to cloth ratio in ft/min*

The recommended pressure drop range in inches of H_2O is 1.5 (minimum) to 8.0 (maximum).

If the measured or calculated pressure drop falls outside the recommended range, contact the Chattanooga-Hamilton County Air Pollution Control Bureau.

5. **Filter Data:**
Type of fabric filters used in baghouse: 16oz. Polyester

Operating temperature: Ambient °F Ambient °F Ambient °F
Manufacturer's Recommended *Normal* *Maximum*

If the maximum operating temperature exceeds the recommended operating temperature, contact the Chattanooga-Hamilton County Air Pollution Control Bureau.

6. **Baghouse Components:**
Check all that apply.

☐ Flow rate instrumentation ☐ Inlet gas temperature instrumentation ☐ Evaporative Cooler

☐ Dew point indicator ■ Differential pressure instrumentation ■ Other (Describe) Air Header Press. Gauge

☐ Heat Exchanger ☐ Transmissometer

7. **Baghouse Operation:**
■ Continuous ☐ Intermittent

8. **Baghouse Description:**

Baghouse Inlet (dirty gas): ■ Bottom Feed ☐ Top Feed

☐ Exterior Filtration ☐ Tangential

☐ Other (Describe): _____

Does the baghouse have a wear-resistant plate? ☐ yes ☐ no

Baghouse shape: ☐ Rectangular ■ Cubical ☐ Cylindrical

☐ Other (Describe): _____

Baghouse volume: 2,500 Ft^3

Baghouse dimensions: 4'8" *Length* Ft 4'8" *Width* Ft 22' *height* Ft

Baghouse shell material: Carbon Steel

8. **Bag Cleaning:** *(check one)*

Fabric Flexing	Reverse Air Cleaning
☐ Mechanical Shaking & Rapping	■ Reverse Jet
☐ Sonic Cleaning	☐ Reverse Flow
☐ Collapse Cleaning	☐ Manual Cleaning
☐ Pulse (pressure) – Jet Cleaning	

9. **Filter Configuration:**

☐ Panels ■ Multiple Tube Bag

☐ Circular Cross-Section Tube ☐ Other (Describe): _____

Filter Fabric: ■ Felted ☐ Woven Number of Compartments: 1

Filter Area: 629 Ft^2 Number of Filters per Compartment: 49

10. **Particle Size Distribution in Microns (μ):**

Particle Type(s): Cement Moisture in gas stream: _____ %

Size	0-5μ	5-10μ	10-20μ	20-44μ	Greater than 44μ
% by weight	99.98				

11. **Dust Disposal:**

■ Automatic (screw conveyor, etc.) ☐ Manual (Describe): _____

How often are hoppers emptied? Every _____ hours

Name of commercial disposal company (if applicable): _____

Is disposed material wetted for transport? ☐ Yes ☐ No

Disposal Site: Powder is recovered

12. **Control Efficiency:**

Manufacturer's Stated Efficiency: _____ %

Required Efficiency: _____ %

Operational Efficiency (performance testing): _____ %

Size	0-5μ	5-10μ	10-20μ	20-44μ	Greater than 44μ
% by weight					

13. **Fan Data:**

Fan Location: ☒ Clean air side (pull through) ☐ Dirty air side (push through)

Fan Design *(check one – A, B, or C)*:

Fan Type:	Blade Type:			
A. ☒ Centrifugal (radial flow)	☐ Forward Curve	☐ Backward Curve	☒ Straight	
B. ☐ Axial-flow (propeller)	☐ Propeller	☐ Tube Axial	☐ Vane Axial	

Fan Properties:

Diameter:	16	Inches	Braking Horsepower:	10.48	BHP
Speed:	3450	RPM	Inlet Area:	1.0000	Ft^2
Volume:	2500	Cfm @ STP	Outlet Area:	1.0000	Ft^2
Static Pressure:		Inches WC	Motor Horsepower:	7.5	HP

☐ Standard ☐ Heavy Duty Submitted copy of Manufacturer's Multirating Tables ☐ Yes ☐ No

Special Construction Materials:

☐ Bronze Alloys ☒ Aluminum ☐ Stainless Steel ☐ Bisonite

☐ Zinc Chromate Primer ☐ Rubber, Phenolics, Vinyls, or Epoxy Covering

C. ☐ Compressor	☐ Positive Displacement	☐ Dynamic	☒ Reciprocating

This is to certify that I am familiar with the operations concerning this equipment and that the information provided on this application is true and complete to the best of my knowledge. ***This form must be completely filled out before it will be processed.***

Company Official: Jeff Hall
Signature

Title: CEO

Date: 1/27/2025

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

Do not write below this line.

_____ Engineer Approval Permit Number: _____

Special Notations: _____

CHATTANOOGA-HAMILTON COUNTY AIR POLLUTION CONTROL BUREAU
2034 Hamilton Place Blvd., Suite 300, Chattanooga, TN 37421-6127

1
EP-0041

PROCESS EQUIPMENT APPLICATION

FORM E010
07/2000

1. ***Name of Company*** (as shown on Line 1, Form E001): Hollingshead Materials, LLC

2. ***Equipment Name*** (as shown on Line 10, Form E001): DCL BV121-100 Bin Vent

3. ***Installation Date:*** 10/23/24 4. ***Type of Process:*** Bin Vent

5. ***Major Raw Materials Used:*** Dry Cement Powder

6. ***Process Weight:*** 880,000 at maximum capacity 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: _____

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	99.95% @ 2.50 Micron & LGR.
SO_x	
NO_x	
CO	
Hydrocarbons	
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				
PM10		0.4821		
Sulfur Oxides			OR	
Nitrogen Oxides (as NO_2)				
Other (specify)				

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

CHATTANOOGA-HAMILTON COUNTY AIR POLLUTION CONTROL BUREAU
2034 Hamilton Place Blvd., Suite 300, Chattanooga, TN 37421-6127

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: 86.0 Ft.
Ground Elevation above sea level at stack base: 655 Ft.
Stack Diameter: 1'6" Ft.
Volume of gas discharged into atmosphere: 7,500 cfm
Gas exit temperature: ambient °F

12. ***Ave. Operating Time***

Daily: 24 hours Weekly: 6 Days Yearly: 52 Weeks

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

Jeff Keller
Company Official

CEO
Title

January 27, 2025
Date

EP-004

AIR POLLUTION CONTROL EQUIPMENT DATA - BAGHOUSE

FORM E102
01/2001

1. **Name of Company:** Hollingshead Materials, LLC
As shown on Line 1 of Form E001

2. **Name of Equipment:** DCL BV121-100 Bin Vent
As shown on Line 9 of Form E001

3. **Equipment Data:**
Manufacturer of Baghouse: DCL

Model Number: BV121-100 Cost of Baghouse: 56,787

Date of Manufacture: 2024 Date of Installation: 11/1/2024

Pre-cleaning Equipment ☒ No ☐ Yes _____
If yes, what type (File appropriate form for control equipment)

Volume of gas discharged from baghouse at dry standard conditions: 7,500 dscfm

Total cloth area of baghouse: 1,452 ft^2

Air to cloth ratio: 5.16:1 Ft/Min *(Divide volume of gas discharged by total cloth area)*

4. **Pressure Drop Across Baghouse:**
Stated by manufacturer: 3-5 Inches of H_2O

Measured (actual): _____ Inches of H_2O

Calculated: _____ (K Factor) X _____ Air to cloth ratio in ft/min = _____ Inches of H_2O

The recommended pressure drop range in inches of H_2O is 1.5 (minimum) to 8.0 (maximum).

If the measured or calculated pressure drop falls outside the recommended range, contact the Chattanooga-Hamilton County Air Pollution Control Bureau.

5. **Filter Data:**
Type of fabric filters used in baghouse: Polypropylene Singed Bags

Operating temperature: Ambient °F (*Manufacturer's Recommended*) Ambient °F (*Normal*) Ambient °F (*Maximum*)

If the maximum operating temperature exceeds the recommended operating temperature, contact the Chattanooga-Hamilton County Air Pollution Control Bureau.

6. **Baghouse Components:**
Check all that apply.

☐ Flow rate instrumentation ☐ Inlet gas temperature instrumentation ☐ Evaporative Cooler

☐ Dew point indicator ☒ Differential pressure instrumentation ☐ Other (Describe) _____

☐ Heat Exchanger ☐ Transmissometer

7. **Baghouse Operation:**
☒ Continuous ☐ Intermittent

8. **Baghouse Description:**

Baghouse Inlet (dirty gas): ■ Bottom Feed ☐ Top Feed

☐ Exterior Filtration ☐ Tangential

☐ Other (Describe): _____

Does the baghouse have a wear-resistant plate? ☐ yes ☐ no

Baghouse shape: ☐ Rectangular ■ Cubical ☐ Cylindrical

☐ Other (Describe): _____

Baghouse volume: 457 Ft^3

Baghouse dimensions: 7 *Length* Ft 7 *Width* Ft 9 *height* Ft

Baghouse shell material: steel

8. **Bag Cleaning:** *(check one)*

Fabric Flexing	Reverse Air Cleaning
☐ Mechanical Shaking & Rapping	■ Reverse Jet
☐ Sonic Cleaning	☐ Reverse Flow
☐ Collapse Cleaning	☐ Manual Cleaning
☐ Pulse (pressure) – Jet Cleaning	

9. **Filter Configuration:**

☐ Panels ■ Multiple Tube Bag

☐ Circular Cross-Section Tube ☐ Other (Describe): _____

Filter Fabric: ■ Felted ☐ Woven Number of Compartments: 1

Filter Area: 1452 Ft^2 Number of Filters per Compartment: 11

10. **Particle Size Distribution in Microns (µ):**

Particle Type(s): Dry Cement Powder Moisture in gas stream: _____ %

Size	0-5µ	5-10µ	10-20µ	20-44µ	Greater than 44µ
% by weight	99.95				

11. **Dust Disposal:**

■ Automatic (screw conveyor, etc.) ☐ Manual (Describe): _____

How often are hoppers emptied? Every _____ hours

Name of commercial disposal company (if applicable): _____

Is disposed material wetted for transport? ☐ Yes ☐ No

Disposal Site: Powder is reclaimed

12. **Control Efficiency:**

Manufacturer's Stated Efficiency: 99.95 %

Required Efficiency: _____ %

Operational Efficiency (performance testing): _____ %

Size	0-5μ	5-10μ	10-20μ	20-44μ	Greater than 44μ
% by weight	99.95				

13. **Fan Data:**

Fan Location: ☒ Clean air side (pull through) ☐ Dirty air side (push through)

Fan Design *(check one – A, B, or C)*:

Fan Type:	Blade Type:			
A. ☒ Centrifugal (radial flow)	☐ Forward Curve	☐ Backward Curve	☒ Straight	
B. ☐ Axial-flow (propeller)	☐ Propeller	☐ Tube Axial	☐ Vane Axial	

Fan Properties:

Diameter:	22	Inches	Braking Horsepower:	18.4	BHP
Speed:	1609	RPM	Inlet Area:	2.2500	Ft^2
Volume:		Cfm @ STP	Outlet Area:	2.2500	Ft^2
Static Pressure:	10	Inches WC	Motor Horsepower:	20	HP

☐ Standard ☐ Heavy Duty Submitted copy of Manufacturer's Multirating Tables ☐ Yes ☐ No

Special Construction Materials:

☐ Bronze Alloys ☒ Aluminum ☐ Stainless Steel ☐ Bisonite

☐ Zinc Chromate Primer ☐ Rubber, Phenolics, Vinyls, or Epoxy Covering

C. ☐ Compressor	☐ Positive Displacement	☐ Dynamic	☒ Reciprocating	

This is to certify that I am familiar with the operations concerning this equipment and that the information provided on this application is true and complete to the best of my knowledge. ***This form must be completely filled out before it will be processed.***

Company Official: Jeff Holder
Signature

Title: CEO

Date: 1/27/2025

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

Do not write below this line.

_____ Engineer Approval Permit Number: _____

Special Notations: _____

CHATTANOOGA-HAMILTON COUNTY AIR POLLUTION CONTROL BUREAU
2034 Hamilton Place Blvd., Suite 300, Chattanooga, TN 37421-6127

1

EP-005

PROCESS EQUIPMENT APPLICATION

FORM E010
07/2000

1. ***Name of Company*** (as shown on Line 1, Form E001): Hollingshead Materials, LLC

2. ***Equipment Name*** (as shown on Line 10, Form E001): DCL CFM470 Filter Module

3. ***Installation Date:*** 11/1/24 4. ***Type of Process:*** Loading Spout

5. ***Major Raw Materials Used:*** Dry Cement Powder

6. ***Process Weight:*** 880,000 at maximum capacity 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: Loading Spout

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	100.00% @ 0.55 Micron & LGR.
SO_x	
NO_x	
CO	
Hydrocarbons	
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				
PM10		0.1286		
Sulfur Oxides			OR	
Nitrogen Oxides (as NO_2)				
Other (specify)				

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

CHATTANOOGA-HAMILTON COUNTY AIR POLLUTION CONTROL BUREAU
2034 Hamilton Place Blvd., Suite 300, Chattanooga, TN 37421-6127

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: 29.0 Ft.
Ground Elevation above sea level at stack base: 655 Ft.
Stack Diameter: 1'5/8" Ft.
Volume of gas discharged into atmosphere: 2,000 cfm
Gas exit temperature: ambient °F

12. ***Ave. Operating Time***

Daily: 24 hours Weekly: 6 Days Yearly: 52 Weeks

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

Company Official

CEO
Title

January 27, 2025
Date

EP-005-006

AIR POLLUTION CONTROL EQUIPMENT DATA - BAGHOUSE

FORM E102
01/2001

1. **Name of Company:** Hollingshead Materials, LLC
   As shown on Line 1 of Form E001

2. **Name of Equipment:** DCL CFM470 Filter Module
   As shown on Line 9 of Form E001

3. **Equipment Data:**
   Manufacturer of Baghouse: DCL

   Model Number: CFM470 Cost of Baghouse: $26,456

   Date of Manufacture: 2024 Date of Installation: 11/1/2024

   Pre-cleaning Equipment ☒ No ☐ Yes _____
   If yes, what type (File appropriate form for control equipment)

   Volume of gas discharged from baghouse at dry standard conditions: 2,000 dscfm

   Total cloth area of baghouse: 470 ft^2

   Air to cloth ratio: 4.25:1 $\frac{Ft}{Min}$ *(Divide volume of gas discharged by total cloth area)*

4. **Pressure Drop Across Baghouse:**
   Stated by manufacturer: 3-5 Inches of H_2O

   Measured (actual): _____ Inches of H_2O

   Calculated: _____ X _____ = _____ Inches of H_2O
   (K Factor) *Air to cloth ratio in ft/min*

   The recommended pressure drop range in inches of H_2O is 1.5 (minimum) to 8.0 (maximum).

   If the measured or calculated pressure drop falls outside the recommended range, contact the Chattanooga-Hamilton County Air Pollution Control Bureau.

5. **Filter Data:**
   Type of fabric filters used in baghouse: Polyester

   Operating temperature: Ambient °F Ambient °F Ambient °F
   Manufacturer's Recommended *Normal* *Maximum*

   If the maximum operating temperature exceeds the recommended operating temperature, contact the Chattanooga-Hamilton County Air Pollution Control Bureau.

6. **Baghouse Components:**
   Check all that apply.
   ☐ Flow rate instrumentation ☐ Inlet gas temperature instrumentation ☐ Evaporative Cooler
   ☐ Dew point indicator ☒ Differential pressure instrumentation ☐ Other (Describe) _____
   ☐ Heat Exchanger ☐ Transmissometer

7. **Baghouse Operation:**
   ☒ Continuous ☐ Intermittent

8. **Baghouse Description:**

Baghouse Inlet (dirty gas): ■ Bottom Feed ☐ Top Feed

☐ Exterior Filtration ☐ Tangential

☐ Other (Describe): _____

Does the baghouse have a wear-resistant plate? ☐ yes ☐ no

Baghouse shape: ☐ Rectangular ☐ Cubical ■ Cylindrical

☐ Other (Describe): _____

Baghouse volume: 75 Ft^3

Baghouse dimensions: 7.5 Ft *Length* 7.5 Ft *Width* 4.5 Ft *height*

Baghouse shell material: steel

8. **Bag Cleaning:** *(check one)*

Fabric Flexing	Reverse Air Cleaning
☐ Mechanical Shaking & Rapping	■ Reverse Jet
☐ Sonic Cleaning	☐ Reverse Flow
☐ Collapse Cleaning	☐ Manual Cleaning
☐ Pulse (pressure) – Jet Cleaning	

9. **Filter Configuration:**

☐ Panels ☐ Multiple Tube Bag

■ Circular Cross-Section Tube ☐ Other (Describe): _____

Filter Fabric: ☐ Felted ■ Woven Number of Compartments: 1

Filter Area: 470 Ft^2 Number of Filters per Compartment: 10

10. **Particle Size Distribution in Microns (µ):**

Particle Type(s): Dry Cement Powder Moisture in gas stream: _____ %

Size	0-5µ	5-10µ	10-20µ	20-44µ	Greater than 44µ
% by weight	99.99				

11. **Dust Disposal:**

■ Automatic (screw conveyor, etc.) ☐ Manual (Describe): _____

How often are hoppers emptied? Every _____ hours

Name of commercial disposal company (if applicable): _____

Is disposed material wetted for transport? ☐ Yes ☐ No

Disposal Site: Powder is reclaimed

12. **Control Efficiency:**

Manufacturer's Stated Efficiency: 99.95 %

Required Efficiency: _____ %

Operational Efficiency (performance testing): _____ %

Size	0-5μ	5-10μ	10-20μ	20-44μ	Greater than 44μ
% by weight	99.95				

13. **Fan Data:**

Fan Location: ☒ Clean air side (pull through) ☐ Dirty air side (push through)

Fan Design *(check one – A, B, or C)*:

Fan Type:	Blade Type:			
A. ☒ Centrifugal (radial flow)	☐ Forward Curve	☐ Backward Curve	☒ Straight	
B. ☐ Axial-flow (propeller)	☐ Propeller	☐ Tube Axial	☐ Vane Axial	

Fan Properties:

Diameter:	15	Inches	Braking Horsepower:	7.78	BHP
Speed:	3600	RPM	Inlet Area:	1.0521	Ft^2
Volume:		Cfm @ STP	Outlet Area:	0.8689	Ft^2
Static Pressure:	9.36	Inches WC	Motor Horsepower:	10	HP

☐ Standard ☐ Heavy Duty Submitted copy of Manufacturer's Multirating Tables ☐ Yes ☐ No

Special Construction Materials:

☐ Bronze Alloys ☒ Aluminum ☐ Stainless Steel ☐ Bisonite

☐ Zinc Chromate Primer ☐ Rubber, Phenolics, Vinyls, or Epoxy Covering

C. ☐ Compressor	☐ Positive Displacement	☐ Dynamic	☒ Reciprocating

This is to certify that I am familiar with the operations concerning this equipment and that the information provided on this application is true and complete to the best of my knowledge. ***This form must be completely filled out before it will be processed.***

Company Official: Jeff Hollar
Signature

Title: CEO

Date: 1/27/2025

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

Do not write below this line.

_____ Engineer Approval Permit Number: _____

Special Notations: _____

CHATTANOOGA-HAMILTON COUNTY AIR POLLUTION CONTROL BUREAU
2034 Hamilton Place Blvd., Suite 300, Chattanooga, TN 37421-6127

1
EP-006

PROCESS EQUIPMENT APPLICATION

FORM E010
07/2000

1. ***Name of Company*** (as shown on Line 1, Form E001): Hollingshead Materials, LLC

2. ***Equipment Name*** (as shown on Line 10, Form E001): DCL CFM 470 Filter Module

3. ***Installation Date:*** 11/1/24 4. ***Type of Process:*** Loading Spout

5. ***Major Raw Materials Used:*** Dry Cement Powder

6. ***Process Weight:*** 880,000 at maximum capacity 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: Loading Spout

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	100.00% @0.55 Micron & LGR.
SO_x	
NO_x	
CO	
Hydrocarbons	
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				
PM10		0.1286		
Sulfur Oxides				
Nitrogen Oxides (as NO_2)			OR	
Other (specify)				

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

CHATTANOOGA-HAMILTON COUNTY AIR POLLUTION CONTROL BUREAU
2034 Hamilton Place Blvd., Suite 300, Chattanooga, TN 37421-6127

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: 29.0 Ft.
Ground Elevation above sea level at stack base: 655 Ft.
Stack Diameter: 1'5/8" Ft.
Volume of gas discharged into atmosphere: 2,000 cfm
Gas exit temperature: ambient °F

12. ***Ave. Operating Time***

Daily: 24 hours Weekly: 6 Days Yearly: 52 Weeks

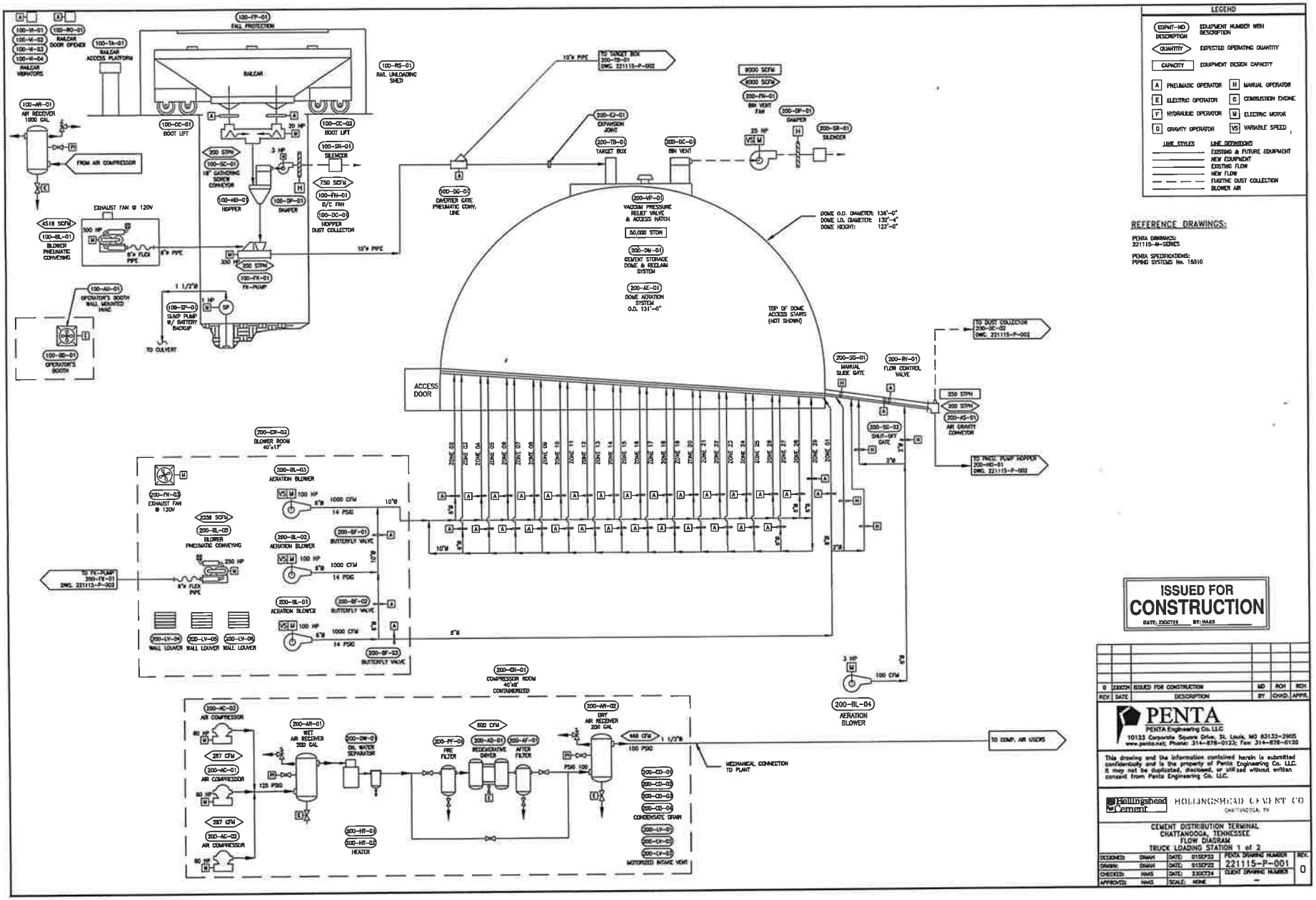
This is to certify that I am familiar with the operations concerning this equipment and that the information provided on this application is true and complete to the best of my knowledge.

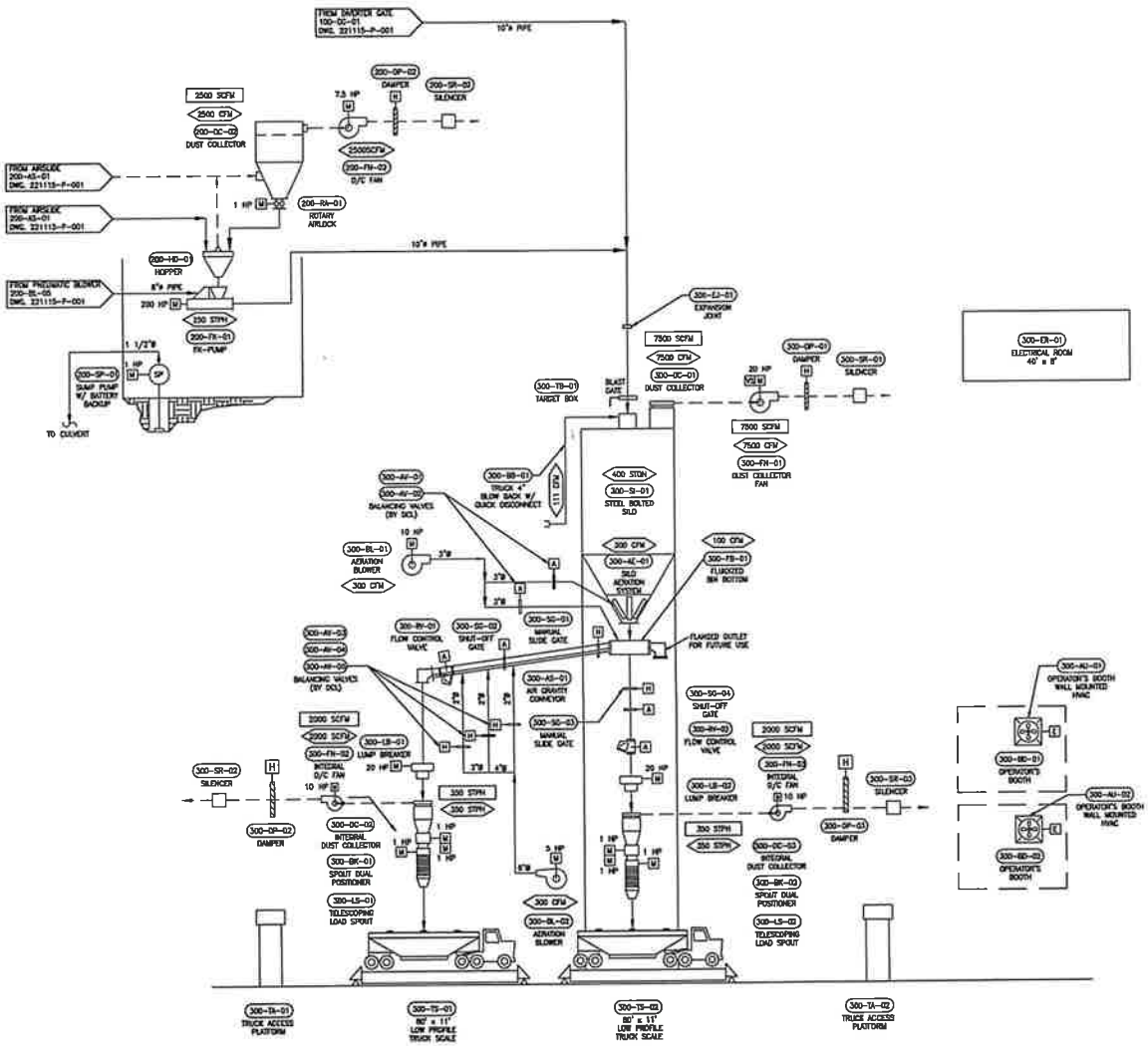
Company Official

CEO
Title

January 27, 2025
Date

FLOW DIAGRAM





LEGEND

EQPMT-NO DESCRIPTION	EQUIPMENT NUMBER WITH DESCRIPTION
QUANTITY	EXPECTED OPERATING QUANTITY
CAPACITY	EQUIPMENT DESIGN CAPACITY
A PNEUMATIC OPERATOR	H MANUAL OPERATOR
E ELECTRIC OPERATOR	C COMBUSTION ENGINE
F HYDRAULIC OPERATOR	M ELECTRIC MOTOR
G GRAVITY OPERATOR	VS VARIABLE SPEED

LINE STYLES / LINE DEFINITIONS

- EXISTING & FUTURE EQUIPMENT
- NEW EQUIPMENT
- EXISTING FLOW
- NEW FLOW
- FUGITIVE DUST COLLECTION
- BLOWER AIR

REFERENCE DRAWINGS:

PENTA DRAWINGS:
221115-M-SERIES

PENTA SPECIFICATIONS:
PIPING SYSTEMS No. 15010

ISSUED FOR CONSTRUCTION
DATE: 2OCT24 BY: MAS

REV.	DATE	DESCRIPTION	BY	CHKD.	APPR.
0	2OCT24	ISSUED FOR CONSTRUCTION	MD	RCH	RCH

PENTA
PENTA Engineering Co. LLC
12123 Corporate Square Drive, St. Louis, MO 63132-2905
www.penta.net; Phone: 314-878-0123; Fax: 314-878-0130

Hollingshead Cement — HOLLINGSHEAD CEMENT CO CHATTANOOGA TN

CEMENT DISTRIBUTION TERMINAL
CHATTANOOGA, TENNESSEE
FLOW DIAGRAM
TRUCK LOADING STATION 2 of 2

DESIGNED:	DMAH	DATE:	01SEP22	PENTA DRAWING NUMBER	REV.
DRAWN:	DMAH	DATE:	01SEP22	221115-P-002	0
CHECKED:	MAS	DATE:	23OCT24	CLIENT DRAWING NUMBER	
APPROVED:	MAS	SCALE:	NONE	–	

														PM10			
Emission Point	exit size	Exhaust Size Square Feet	Exhaust Diameter	Exhaust Temp	ACFM	SCFM	Stack Velocity ft/sec	Nonstack Emission Point Elevation	Grade Elevation	Stack Height above grade	gr/cf	gr/min	lbs/min	lbs/hr	lbs/day	lbs/yr	tn/yr
EP-001	6" SQ.	0.2500	0.5643	ambient	855	800	57	655.75	660	-4.3	0.0075	6.0	0.0009	0.0514	1.2343	450.5138	0.2253
EP-002	1'-8" SQ.	2.7778	1.8811	ambient	9,617	9,000	58	793.5	658	135.5	0.0075	67.5	0.0096	0.5786	13.8857	5,068.2806	2.5341
EP-003	1' SQ.	1.0000	1.1287	ambient	2,671	2,500	45	674.5	658	16.5	0.0075	18.8	0.0027	0.1607	3.8571	1,407.8557	0.7039
EP-004	1'-6" SQ.	2.2500	1.6930	ambient	8,014	7,500	59	741	655	86.0	0.0075	56.3	0.0080	0.4821	11.5714	4,223.5672	2.1118
EP-005	Ø1'-5/8"	0.8689	1.0521	ambient	2,137	2,000	41	684	655	29.0	0.0075	15.0	0.0021	0.1286	3.0857	1,126.2846	0.5631
EP-006	Ø1'-5/8"	0.8689	1.0521	ambient	2,137	2,000	41	684	655	29.0	0.0075	15.0	0.0021	0.1286	3.0857	1,126.2846	0.5631

Operational Assumptions:

hours per day:	24
days per year:	365
hours per year:	8760

SCFM to ACFM

Standard absolut	29.92
Actual pressure	28.52
Actual temp.	70
Standard temp.	520

mg/Nm3: milligram per **normal** meter cubed; Based on the Ideal Gas Law, this is a standard unit, such as a **stardard** cubic foot.

$$5\ \frac{mg}{Nm^3} = \frac{5}{1}\ \frac{mg}{m^3} \times \frac{0.015432\ grains}{1\ mg} \times \frac{1\ m^3}{35.3147\ ft^3} = \frac{0.077162\ grains}{35.3147\ ft^3} = \mathbf{0.002185\ \frac{grains}{ft^3}}$$

7000 grains	per	pound
8760 hours	per	year
24 hours	per	day

					PM10
Equipment #	Description	Emission Description	Emission Point	SCFM	tn/yr
100-DC-01	Filter Cell #1	Rail Pit Dust Collector	EP-001	800	0.23
200-DC-01	Filter Cell #2	Dome Dust Collector	EP-002	9,000	2.53
200-DC-02	Filter Cell #3	Dust Collector	EP-003	2,500	0.70
300-DC-01	Filter Cell #4	Bin Vent	EP-004	7,500	2.11
300-DC-02	Filter Cell #5	Loading Spout	EP-005	2,000	0.56
300-DC-03	Filter Cell #6	Loading Spout	EP-006	2,000	0.56
					6.70