PERMITTEE

Building Materials Manufacturing Corp.
5138 Madison Ave.
Tampa, FL 33619

PERMITTING AUTHORITY

Environmental Protection Commission of Hillsborough County
3629 Queen Palm Dr.
Tampa, Florida 33619

PROJECT

Air Permit No. 0570056-042-AC
Minor Air Construction Permit

This permit increases the minimum operating temperature in the afterburner combustion chamber from 1200 °F to 1300 °F based on a three-hour rolling average. Also, this permit authorizes the replacement of the baghouses associated with West and East Limestone Storage Silos (EU Nos. 006 and 008) and the Sand Storage Silos (EU No. 007). In addition, this permit replaces the limit on the amount of gallons of asphalt processed through the asphalt oxidizing plant (EU Nos. 004 and 013) with a limit on the amount of tons of asphalt charged to the stills.

Futhermore, this permit modifies the potential emission calculations for EU Nos. 100, 101, 102, and 105 and accounts for the partial enclosures around the transfer points.

NOTICE AND PUBLICATION

The EPCHC distributed a draft minor air construction permit package on July 20, 2018. The applicant published the Public Notice in the La Gaceta on August 10, 2018. The EPCHC received the proof of publication on August 10, 2018. No requests for administrative hearings or requests for extensions of time to file a petition for administrative hearing were received.

COMMENTS

On August 15, 2018, the EPCHC received two comments from Building Materials Manufacturing Corp. via email. The following summarizes the comments and the EPCHC's response.

1. In Specific Condition No. A.3., it states "The hours of operation of are not limited". The word "of" is a typo.

   Response: As requested, the condition is corrected as follows.

   From: The hours of operation of are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C. and Permit No. 0570056-036-AC]

   To: The hours of operation are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C. and Permit No. 0570056-036-AC]

2. In Specific Condition No. B.2., the table heading states "Process/Unloading Rate". Building Materials requests to change the title to "Maximum Process/Unloading Rate" to avoid any confusion while reading the permit in the future.

   Response: As requested, the table heading in the condition is changed as follows.

From:

EU No.	*Process/Unloading Rate*	Hours of Operation per 12 Consecutive Month Period

To:

EU No.	*Maximum Process/Unloading Rate*	Hours of Operation per 12 Consecutive Month Period

CONCLUSION

The final action of the EPCHC is to issue the permit with the minor changes, corrections and clarifications as described above.

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PERMITTEE

Building Materials Manufacturing Corp.
5138 Madison Ave.
Tampa, FL 33619

Authorized Representative:
John Maneth, Plant Manager

Air Permit No. 0570056-042-AC
Expiration Date: August 1, 2021

Modify the Material Handling Operations and Blow Stills
Afterburner Temperature
Hillsborough County, Florida

PROJECT

This is the final air construction permit, which authorizes an increase in the minimum operating temperature of the afterburner associated with the blow stills, replacement of three baghouses, and increases the hourly material handling rates. The proposed work will be conducted at the existing facility, which is an asphalt roofing shingles manufacturing operation categorized under Standard Industrial Classification No. 2952 – Asphalt Felts and Coating. The existing facility is located in Hillsborough County at 5138 Madison Ave., Tampa, FL 33619. The UTM coordinates are Zone 17, 362.5 km East, and 3087.1 km North.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the Legal Department of the EPC at 3629 Queen Palm Drive, Tampa, Florida 33619, Phone 813-627-2600, Fax 813-627-2602 and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tampa, Florida

Janet L. Dougherty
Executive Director

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Air Construction Permit package was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the following persons.

John Maneth, Plant Manager, Building Materials Manufacturing Corp. john.maneth@gaf.com
Aaron Grierson, Building Materials Manufacturing Corp. aaron.grieson@gaf.com
Scott McCann, P.E., Geosyntec Consultants, Inc. smccann@geosyntec.com

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

Sahand Nassen 8/27/18

Clerk Date

FACILITY DESCRIPTION

Building Materials manufactures asphalt roofing shingles. The manufacturing process begins by oxidizing asphalt flux in one of two blow stills. When needed in production, the asphalt flux is transferred to a 25,000 gallon preheating tank, which is maintained at approximately 450° F. This tank is a fixed roof tank with a 6" vent.

This tank is heated using recovered heat from the afterburner (referred to as the furnace/fume afterburner) described below via recirculation to the tank. The flux is then transferred to one of two blow stills, North and South (EU 103 and EU 004), where the product is oxidized. The physical properties of the flux are tested to determine the length of blow time necessary.

Each blow still oxidizes approximately 20,000 gallons per batch by bubbling air into the still until the asphalt obtains the required properties. The oxidation process generates an exothermic chemical reaction, so an external water spray system is used to maintain the temperature of the flux at the desired level, typically around 530°F. Each blow process typically lasts between 3.5 to five hours, and the total batch, which includes filling, blowing, and emptying the blow stills, lasts an average of 7 hours. Emissions generated during the oxidation of the asphalt are directed to a natural gas fired furnace/fume afterburner. During a blow, the furnace/fume afterburner operates at the rated capacity of 9 MMBtu/hr. At times when blows are not occurring, the heat input rate to the afterburner is 2.5 MMBtu/hr. After oxidation, the product, called asphalt coating, is pumped from the blow stills to the coating storage area.

The roofing shingle manufacturing process also requires the use of bulk materials such as sand, coal slag, colored granules, and limestone. The materials are received by truck and railcar and unloaded into silos. Sand is unloaded into one of two Sand Storage Silos (EU 007). The unloading process begins at the sand silo loading system (EU 100), which is composed of a gravity drop from the center of the trucks onto a belt conveyor, which feeds into a hopper, which then transfers the sand to a bucket elevator. The truck to conveyor transfer point and the hopper to bucket elevator transfer point are controlled by partial enclosures.

At the top of the bucket elevator, the sand can be diverted to the appropriate sand silo (EU No. 007). Fine sand is typically stored in the North Silo and coarse sand is typically stored in the South Silo. Only one silo can be loaded at a time. The particulate matter emissions generated during the loading of the North and South silos will be controlled by a new Donaldson Torit Powercore, Model No. CPV-4, dust collector, or equivalent. The maximum air flow rate of the dust collector is limited to 2,700 DSCFM.

Sand and coal slag are received by truck or railcar at the Truck/Railcar Unloading - East (EU 102) station. Sand and coal slag from trucks or railcars are unloaded through a grate into a below grade hopper. From the hopper, an enclosed conveyor transfers the material to a bucket elevator. The bucket elevator then lifts the material to a chute at the top of Storage Silo No. 3 (EU 101). Particulate matter emissions from this silo are controlled by the same baghouse that controls the Back Surfacing System (EU 002). Particulate matter emissions from the conveyor, bucket elevator, and chute are controlled by partial enclosures.

Colored granules are received by truck or railcar (EU No. 105) and unloaded into two underground receiving hoppers. The granules are transferred from the hoppers to a partially enclosed conveyor, which conveys the material to a bucket elevator. The bucket elevator transports the granules to the top of a bank of 24 storage silos (EU No. 105). At the top of the silos is a secondary mobile conveyor system that allows the operator to direct the material into the final loading chute above the desired silo for loading.

The silo loading openings typically remained covered unless actively being loaded. All of the area above the silos, including the mobile conveyor system, is enclosed by a structure called the penthouse. Particulate matter emissions are controlled through the use of partial enclosures.

Limestone is pneumatically pumped from a truck into either the West Limestone Storage Silo (EU 006) or the East

Limestone Storage Silo (EU 008). The particulate matter emissions from each silo will be controlled by a new Donaldson Torit Powercore, Model No. CPV-4, dust collector, or equivalent. The maximum air flow rate of each dust collector is limited to 2,700 DSCFM. Each silo will have its own dust collector.

The facility is subject to 40 CFR 63 Subpart AAAAAAA – NESHAP: Asphalt Processing and Asphalt Roofing Manufacturing. However, the State of Florida had not adopted this regulation, therefore, it is only referenced here in the facility description.

This project will modify the following emissions units.

EU No.	Emission Unit Description
004	Asphalt Oxidizing Plant: South Still
006	West Limestone Storage Silo
007	Sand Storage Silos/Elevator System - West
008	East Limestone Storage Silo
100	Sand Truck Unloading - West (Gravity Drop)
101	Storage Silo No. 3
102	Truck/Railcar Unloading - East (Hopper, Conveyor and Bucket Elevator)
103	Asphalt Oxidizing Plant: North Still
105	Granule Receiving and Storage Emission Point No. 1: Truck/Railcar Drop to Hoppers Emission Point No. 2: Conveyor to Elevator Emission Point No. 3: Elevator to Silos (Penthouse)

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility has no units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is not a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Environmental Protection Commission of Hillsborough County. The mailing address is 3629 Queen Palm Dr., Tampa, Florida 33619. All documents related to applications for permits to operate an emissions unit shall be submitted to the Environmental Protection Commission of Hillsborough County.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Environmental Protection Commission of Hillsborough County at: 3629 Queen Palm Dr., Tampa, Florida 33619.

3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); Appendix D (Common Testing Requirements); Appendix E 40 CFR 60 Subpart A); and Appendix F (40 CFR 60 Subpart UU).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. The permittee shall not store, handle, process, or use in any process the volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems as follows and as deemed necessary and ordered by the Environmental Protection Commission of Hillsborough County: [Rule 62-296.320(1), F.A.C.]

   A) Maintain tightly fitting cover, lids, etc. on all containers when they are not being handled, tapped, etc.
   B) Where possible and practical, procure/fabricate a tightly fitting cover for any open trough, basin, etc. of VOC so that it can be covered when not in use.
   C) Immediately attend to all spills/waste as appropriate

8. The use of property, facilities, equipment, processes, products, or compounds, or the commission of paint overspraying or any other act, that causes or materially contributes to a public nuisance is prohibited, pursuant to the Hillsborough County Environmental Protection Act, Section 16, Chapter 84-446, Laws of Florida, as Amended.

9. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in Rule 62-296.320, F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alterations, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. Reasonable precautions shall include, but not be limited to, the following: [Rule 62-296.320(4)(c), F.A.C.]

   A) Paving or maintenance of roads, parking areas, and yards.
   B) Application of water when necessary to control emissions.

C) Removal of particulate matter from roads and other paved areas under control of the owner or operator to prevent re-entrainment, and from buildings or work areas to prevent particulates from becoming airborne.
D) Proper operation and maintenance of the material transport and storage system.
E) Use of coverings or enclosures, as necessary.
F) Curtailing of operation if winds are entraining unconfined particulate matter.
G) Posting of vehicle (or truck) speed limits, if necessary.
H) Ensuring that the limestone filler heater storage silo high level warning system is operational when the silo is being filled with limestone.
I) Use wind shields or coverings around the material handling and storage operations as necessary to ensure compliance with the opacity limit.

10. When the Environmental Protection Commission of Hillsborough County (EPC) after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in Rules 62-204, 62-210, 62-212, 62-296, or 62-297, F.A.C., or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit, unless the EPCHC obtains other information sufficient to demonstrate compliance. The owner or operator of the emissions unit shall provide a report on the results of said tests to the EPC in accordance with the provisions of subsection 62-297.310(10), F.A.C. [Rule 62-297.310(8)(c), F.A.C]

11. The permittee shall not cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]

12. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided (1) best practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the EPCHC for longer duration. Excess emissions that are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(1), F.A.C.]

13. In order to establish the facility as a synthetic minor source for Hazardous Air Pollutants (HAPs), the HAP, as defined in Rule 62-210.200, F.A.C., emissions shall be less than 10 tons in any 12 consecutive month period for any individual HAP, and less than 25 tons in any 12 consecutive month period for any combination of HAPs. [Rule 62-210.200, F.A.C.]

14. The facility wide maximum natural gas fuel usage shall not exceed 127 million cubic feet per twelve consecutive month period. [Rule 62-4.070(3), F.A.C. and Permit No. 0570056-006-AC]

15. All emission units with a control device shall have their emissions vented through the corresponding control device. [Rules 62-210.650, 62-4.070(3), F.A.C. and Permit No. 0570056-026-AC]

16. If the permittee wishes to transfer this permit to another owner, an "Application for Transfer of Permit" (DEP Form 62-210.900(7)) shall be submitted, in duplicate, to the Environmental Protection Commission of Hillsborough County within 30 days after the sale or legal transfer of the permitted facility. [Rule 62-4.120, F.A.C.]

17. The facility is subject to 40 CFR 60 – Subpart UU: Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture. The permittee shall comply with the following requirements: [Rule 62-204.800, F.A.C.; 40 CFR 60.7, 60.11, and 60.12; 40 CFR 60.470, and Permit No. 0570056-040-AC]

    A) The permittee shall furnish the EPC written notification as follows: [40 CFR 60.7(a)]
        i. A notification of any physical or operational change to an existing facility which may increase the emissions rate of any air pollutant to which a standard applies, unless that change

is specifically exempted under an application subpart or in §60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emissions control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The epc may request additional relevant information subsequent to this notice. [40 CFR 60.7 (a)(4)]

B) The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]

C) The permittee shall maintain a file of all measurements, including performance testing measurements and all other information required by this part recorded in a permanent form suitable for inspection. The file shall be retained for at least two years following the date of such measurements, maintenance, reports, and records. Visible emissions test results are required to be maintained on-site for five years. [40 CFR 60.7(f)]

D) Compliance with opacity standards shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A (40 CFR 60). [40 CFR 60.11(b)]

E) The opacity standards set forth in this permit shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]

F) At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the EPC which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]

G) No owner or operator subject to the provisions of this part shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard that is based on the concentration of a pollutant in the gases discharged to the atmosphere. [40 CFR 60.12]

18. Annual Operating Report (AOR): The information required by the Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Environmental Protection Commission of Hillsborough County. All synthetic non-Title V sources shall submit a completed DEP Form 62-210.900(5) unless the annual operating report is submitted using the DEP's electronic annual operating report software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. [Rule 62-210.370(3), F.A.C.]

    {Permitting Note: Resources to help you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you have questions or need assistance after reviewing the information posted on the EAOR website, please contact the FDEP by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

19. Construction and Expiration: The expiration date shown on the first page of this permit provides time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding this expiration date, all specific emissions limitations and operating requirements established by this permit shall remain in effect until the facility or emissions unit is permanently shut down. For good cause, the permittee may request that a permit be extended. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Permitting Authority in writing before the permit expires. [Rules 62-4.070(3) & (4), 62-4.080 & 62-210.300(1), F.A.C.]

20. Application for FESOP: Subsequent to any construction, reconstruction or modification of a facility or emissions unit authorized by an air construction permit, and demonstration of compliance with the conditions of such air construction permit, the owner or operator of such facility or emissions unit shall obtain an air operation permit revision in accordance with all applicable provisions of this chapter and Chapter 62-4, F.A.C. **The operating permit application shall be submitted within 90 days of completion of testing of each new dust collector associated with EU Nos. 006, 007, and 008, or at least 90 days prior to the expiration date of this permit, whichever occurs first**. [Rules 62-4.070(3) and 62-210.300(2), F.A.C.]

A. EU Nos. 004 and 103 – Asphalt Oxidizing Plant

This section of the permit addresses the following emissions units.

004	Asphalt Oxidizing Plant: South Still
103	Asphalt Oxidizing Plant: North Still

PERFORMANCE RESTRICTIONS

A.1. In order to demonstrate compliance with the emission limitations in Specific Condition No. 4, the following shall apply: [40 CFR 60.472(b)(3), Rules 62-4.070(3), 62-210.200(PTE), and 62-204.800, F.A.C., and Permit Nos. 0570056-026-AC and 0570056-036-AC, and Application No. 0570056-042-AC]

A) The combined amount of asphalt charged to both stills shall not exceed 109,500 tons per twelve consecutive month period.
B) Maximum Batch Size: 19,700 gallons
C) Minimum afterburner VOC destruction efficiency: 85%
D) The minimum temperature in the afterburner combustion chamber shall be 1300° F based on a three hour rolling average while oxidizing asphalt. The minimum flue retention time is 0.3 seconds in the combustion zone.
E) Average Blow Time: 4 hours/batch
F) Average Batch Time: 7 hours
G) Both blow stills shall be allowed to operate simultaneously, but only one still shall be allowed to be blown at any given time.
H) No catalyst shall be used
I) The asphalt oxidizing plant shall be equipped with an alarm that notifies plant personnel if the minimum temperature in the afterburner combustion chamber drops below 1300° F while oxidizing asphalt.

A.2. Authorized Fuel: The afterburner shall be fired on natural gas with a maximum heat input of 9 MMBtu/hour, and shall operate continuously when a charge is in either blow still. [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

A.3. Restricted Operation: The hours of operation are not limited (8,760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C. and Permit No. 0570056-036-AC]

EMISSIONS STANDARDS

A.4. Emissions Standards: As requested by the permittee, the combined emissions for EU Nos. 004 and 103 shall not exceed the following: [Rule 62-296.712, F.A.C.; 40 CFR 60.472; Permit No. 0570056-036-AC]

Allowable PM Emissions	PM ton/yr	VOC ton/yr	Opacity
0.99 lb/ton of asphalt charged to the still during blowing	54.0	71.7	0%

{Permitting note: By meeting the PM standard of 0.99 lb/ton, the Asphalt Oxidizing Plant will meet the PM standard of 1.2 lb/ton of NSPS subpart UU}

TESTING REQUIREMENTS

A.5. Annual Compliance Tests: During each calendar year (January 1st to December 31st), each emissions unit shall be tested to demonstrate compliance with the visible emissions (VE) standard specified in Specific Condition No. A.4. Each VE test shall be a minimum of 30 minutes in duration and as specified in Specific Condition No. A.8. [Rule 62-297.310(8)(a)1, F.A.C.]

A.6. Compliance Tests Prior to Renewal of the Operating Permit. In addition to the annual compliance tests specified above, compliance tests shall also be performed for Particulate Matter, Volatile Organic Compounds, and Destruction Efficiency on the inlet and the outlet of the afterburner prior to obtaining a renewed operation permit to demonstrate compliance with the limits specified in Specific Condition Nos. A.1 and A.4. The tests shall be performed at least 120 days prior to the expiration date of this permit. [Rules 62-210.300(2)(a) and 62-297.310(8)(b), F.A.C.]

A.7. Test Requirements: At least 15 days prior to the date on which each required emissions test is to begin, the owner or operator shall notify the air compliance program identified by permit, unless shorter notice is agreed to by the appropriate air compliance program. The notification shall include the date, time, place of each such test, Facility ID Number, Emission Unit ID Number(s) and description(s), Emission Point Number(s) and description(s), test method(s), pollutant(s) to be tested, along with the name and telephone number of the person who will be responsible for conducting such test(s) for the owner or operator. If a scheduled emissions test needs to be re-scheduled, the owner or operator shall submit to the appropriate air compliance program a revised notification at least seven days prior to the re-scheduled emissions test date or arrange a re-scheduled test date with the appropriate air compliance program by mutual agreement. [Rule 62-297.310(9), F.A.C. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(9), F.A.C.]

A.8. Testing of emissions shall be conducted with the source operating at capacity and as follows. If it is impracticable to test at the testing capacity, an emissions unit may be tested at less than the testing capacity. If an emissions unit is tested at less than the testing capacity, another emissions test shall be conducted and completed no later than 60 days after the emissions unit operation exceeds 110% of the capacity at which its most recent emissions test was conducted. [Rules 62-4.070(3) and 62-297.310, F.A.C.; 40 CFR 60.474]

A) Capacity is defined as 90-100% of 19,700 gallons per batch. The amount of asphalt charged to the oxidation still (gallons and tons) and the duration of the blow (hours) shall be included with the test results.
B) The test shall be performed while the still is actively being blown.
C) The test shall be performed on the opposite still that was tested during the most recent compliance test (i.e. if the previous compliance test was performed while the North Blow Still tank was blown, then the South Blow Still should be in operation during the new test).
D) In the event that the blowing still which is due for testing is not available (or inoperable) for the forthcoming scheduled test, the permittee may conduct the test on the alternate available blowing still. The test report shall specify the blowing still that the test was performed on.
E) The permittee shall use a temperature monitoring device to monitor and record continuously the temperature during the particulate matter test runs, and submit the temperature data with the test report.
F) The particulate matter testing shall comply with the requirements specified in Specific Condition No. A.9.

A.9. When testing the Asphalt Oxidizing Plant (EU No. 004 and 103) to demonstrate compliance with the particulate matter limit specified in Specific Condition No. A.4, the following shall apply: [Rules 62-4.070(3) and 62-297.310, F.A.C.; and 40 CFR 60.474]

A) If the final product is fiberglass shingle, then the test shall be conducted on the highest weight nominal shingle typically produced. If a different product is produced, then testing shall be consistent with 40 CFR 60.474(a).
B) The emission rate (E) of particulate matter shall be computed for each run using the following equation:

E = (csQsd)/(PK)
where:
E = emission rate of particulate matter, kg/Mg (lb/ton)
cs = concentration of particulate matter, g/dscm (gr/dscf)
Qsd = volumetric flow rate of effluent gas, dscm/hr (dscf/hr)
P = asphalt roofing shingle production rate or asphalt charging rate, Mg/hr (ton/hr)
K = conversion factor, 1000 g/kg [7000 (gr/lb)]

C) Method 5A shall be used to determine the particulate matter concentration (c_s) and volumetric flow rate (Q_{sd}) of the effluent gas. For the blowing stills, the sampling time and sample volume for each run shall be at least 90 minutes or the duration of the coating blow or non-coating blow, whichever is greater, and 2.25 dscm (79.4 dscf).

D) For the blowing stills, the asphalt charging rate (P) shall be computed for each run using the following equations:

P = (Vd)/(K′ Θ)

where:
P = asphalt charging rate to blowing still, Mg/hr (ton/hr).
V = volume of asphalt charged, m^3 (ft^3).
D = density of asphalt, kg/m^3 (lb/ft^3).
K ′= conversion factor, 1000 kg/Mg (2000 lb/ton).
Θ = duration of test run, hr.

(i) The volume (V) of asphalt charged shall be measured by any means accurate to within 10 percent.

The density (d) of the asphalt shall be computed using the following equation:

$$d = K_1 - K_2 T_i$$

where:
d = Density of the asphalt, kg/m^3 (lb/ft^3)
K_1 = 1056.1 kg/m^3 (metric units) or 64.70 lb/ft^3 (English Units)
K_2 = 0.6176 kg/(m^3 °C) (metric units) or 0.0694 lb/(ft^3 °F) (English Units)
T_i = temperature at the start of the blow, °C (°F)

A.10. Test Methods: Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5A	Determination of Particulate Matter Emissions from the Asphalt Processing and Asphalt Roofing Industry
9	Visual Determination of the Opacity of Emissions from Stationary Sources
25A	Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the EPCHC. [Rules 62-204.800, F.A.C.; and Appendix A of 40 CFR 60]

MONITORING REQUIREMENTS

A.11. The permittee shall operate a temperature monitor on the Asphalt Oxidizing Plant to measure and display the afterburner/furnace combustion chamber temperature. Records shall be maintained of this temperature during each batch processed based on periodic (beginning and end of blow cycle) readings of the temperature monitor. [Rule 62-4.070(3), F.A.C. and 40 CFR 60.473]

RECORDS AND REPORTS

A.12. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the following. [Rule 62-297.310(10), F.A.C.]

A) The blow still in operation during the test (North or South)
B) The heat input rate to the asphalt oxidizer during the blowing cycle
C) The temperature data specified in Specific Condition No. A.11.
D) The amount of asphalt blown per batch (gallons and tons) and the duration of the blow (hours).

A.13. The permittee shall maintain records in order to ensure compliance with Specific Condition No. 1. The records shall include, as a minimum, the following information and shall be made available for inspection by the Environmental Protection Commission of Hillsborough County for at least three years. The records shall include, as a minimum: [Rules 62-4.070(3) and 62-4.160(14), F.A.C. and Permit No. 0570056-036-AC]

A) Date
B) Blow Still Identification
C) Batch Size (in gallons and tons)
D) Monthly and rolling 12-month total of asphalt charged to the oxidation stills (in tons)
E) Monthly and rolling 12-month total of hours of operation
F) Temperature records as described in Specific Condition No. A.11.

B. EU Nos. 006, 007, 008, 100, 101, 102, 105 – Truck Unloading and Silos

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
006	West Limestone Storage Silo
007	Sand Storage Silos/Elevator System - West
008	East Limestone Storage Silo
100	Sand Truck Unloading - West (Gravity Drop) Emission Point (EP) No. 1: Truck to Conveyor Enclosure EP No. 2 – Conveyor to Hopper/Bucket Elevator EP No. 3 - Bucket Elevator to Conveyor
101	Storage Silo No. 3 Emission Point No. 1: Bucket Elevator to Silo Loading Chute
102	Truck/Railcar Unloading - East (Hopper, Conveyor and Bucket Elevator) Emission Point (EP) No. 1 – Truck to Underground Hopper EP No. 2 - Hopper to Bucket Elevator EP No. 3 - Bucket Elevator to Silo
105	Granule Receiving and Storage Emission Point (EP) No. 1 - Truck/Railcar Drop to Hoppers EP No. 2 - Conveyor to Elevator EP No. 3 – Bucket Elevator to Conveyor EP No. 4 - Bucket Elevator to Silos (Penthouse)

EQUIPMENT

B.1. Equipment Name: As requested by the permittee, the permittee is authorized to install a total of three Donaldson Torit Powercore, Model No. CPV-4, dust collectors, or equivalent, to control emissions from EU Nos. 006, 007, and 008. The maximum air flow rate of each dust collector shall not exceed 2,700 DSCFM. [Rule 62-4.070(3), F.A.C., and Application No. 0570056-042-AC]

PERFORMANCE RESTRICTIONS

B.2. As requested by the permittee, in order to demonstrate compliance with the opacity standard specified in Specific Condition No. B.5 below, the following limitations shall apply: [Rule 62-4.070(3), F.A.C., and Permit Nos. 0570056-023-AC and 0570056-028-AC, and Application No. 0570056-042-AC]

EU No.	Maximum Process/Unloading Rate	Hours of Operation per 12 Consecutive Month Period
006	Pneumatic Line Pressure of 12 psig	8,760
007	60 ton/hour of sand	8,760
008	Pneumatic Line Pressure of 12 psig	8,760
100	60 ton/hour of sand and 87,000 tons per year	8,760

B. EU Nos. 006, 007, 008, 100, 101, 102, 105 – Truck Unloading and Silos

EU No.	Maximum Process/Unloading Rate	Hours of Operation per 12 Consecutive Month Period
101	80 ton/hour of sand and coal slag and 81,000 tons/12 month period of sand and coal slag	8,760
102	80 ton/hour of sand/coal slag and 240,000 tons per year	NA
105	60 ton/hour of granules to the silos and 438,000 tons/12 month period	8,760

B.3. The permittee shall avoid pneumatic line pressures that may cause baghouse failure during the loading of the storage silos. The line pressure shall not exceed 12 psig. [Rule 62-4.070(3), F.A.C.]

B.4. For EU Nos. 100, 101, 102, and 105, the permittee shall use enclosures as necessary around the conveyors, elevators, hoppers, and silos in order to comply with the opacity standard specified in Specific Condition No. B.5 below. [40 CFR 60.472, Rules 62-296.320(1) and 62-4.070(3), F.A.C., Permit No. 0570056-028-AC, and Application No. 0570056-042-AC]

EMISSIONS STANDARDS

B.5. As requested by the permittee, the potential particulate matter emissions and opacity shall not exceed the following. [Rule 62-296.711, F.A.C.; 40 CFR 60.472; Chapter 1-3.52 Rules of the EPC; and Application No. 0570056-042-AC]:

EU No.	PM Emissions Limiting Standard (gr/dscf)	Allowable PM ton/yr (based on the emissions limiting standard)	Opacity
006	0.02	2.0	0%
007	0.02	2.0	0%
008	0.02	2.0	0%
100	NA	NA	1%
101	NA	NA	1%
102	NA	NA	1%
105	NA	NA	1%

* EU 002 and EU 101 are controlled by the same baghouse. The potential and allowable PM emissions from the baghouse are included in EU 002.

TESTING REQUIREMENTS

B.6. Initial Compliance Test: EU Nos. 101, 102, and 105 shall be tested within 60 days of increasing the hourly handling rates, and annually thereafter, to demonstrate compliance with the visible emissions (VE) standard specified in Specific Condition No. B.5. Each VE test shall be a minimum of 30 minutes in duration and shall comply with the requirements in Specific Condition No. B.8 below. [Rule 62-297.310(8)(a), F.A.C.]

B.7. Initial Compliance Test: EU Nos. 006, 007, and 008 shall be tested within 60 days of the installation of each new dust collector, and annually thereafter, to demonstrate compliance with the visible emissions (VE) standard specified in Specific Condition No. B.5. Each VE test shall be a minimum of 30 minutes in duration and as specified by Specific Condition No. B.8 below. [Rule 62-297.310(8)(a), F.A.C.]

B.8. Testing of emissions shall be conducted with the source operating at capacity and as follows. Capacity is defined as 90-100% of the capacity specified in Specific Condition No. B.2., and as follows. If it is impracticable to test at the testing capacity, an emissions unit may be tested at less than the testing capacity. If an emissions unit is tested at less than the testing capacity, another emissions test shall be conducted and completed no later than 60 days after the emissions unit operation exceeds 110% of the capacity at which its most recent emissions test was conducted. [Rules 62-4.070(3) and 62-297.310(3), F.A.C. and 40 CFR 60.474]

A) For EU No. 007, test while handling fine sand.
B) For EU Nos. 006 and 008, test at a minimum of 9 psi truck unloading pressure and 25 ton/hour, unless it is unattainable in practice to reach that silo loading rate.
C) For EU No. 100:
   i. The VE test shall be conducted concurrently with the VE test for EU 007.
   ii. VE testing shall be performed on three separate emission points: EP No. 1 – Truck to Conveyor , EP No. 2 – Conveyor to Hopper/Bucket Elevator , and EP No. 3 - Bucket Elevator to Conveyor.
   iii. Test while handling fine sand.
D) For EU No. 101, conduct testing of EU Nos. 002 and 101 while both the silo loading and the back surfacing operations are taking place, in order to simulate highest expected emissions.
E) For EU No. 102,
   i. VE testing shall be performed on 3 separate emission points: EP No. 1 – Truck to Underground Hopper EP No. 2 - Hopper to Bucket Elevator, and EP No. 3 - Bucket Elevator to Silo.
F) For EU No. 105,
   i. VE testing shall be performed on 4 separate emission points: EP No. 1 - Truck/Railcar Drop to Hoppers, EP No. 2 - Conveyor to Elevator, EP No. 3 – Bucket Elevator to Conveyor, and EP No. 4 - Bucket Elevator to Silos (Penthouse).
   ii. The test for the silo loading shall be from the highest point of opacity observed from the penthouse.
   iii. The test report shall indicate the point on the penthouse at which the emissions were observed

B.9. Test Requirements: At least 15 days prior to the date on which each required emissions test is to begin, the owner or operator shall notify the air compliance program identified by permit, unless shorter notice is agreed to by the appropriate air compliance program. The notification shall include the date, time, place of each such test, Facility ID Number, Emission Unit ID Number(s) and description(s), Emission Point Number(s) and description(s), test method(s), pollutant(s) to be tested, along with the name and telephone number of the person who will be responsible for conducting such test(s) for the owner or operator. If a scheduled emissions test needs to be re-scheduled, the owner or operator shall submit to the appropriate air compliance program a revised notification at least seven days prior to the re-scheduled emissions test date or arrange a re-scheduled test date with the appropriate air compliance program by mutual agreement. [Rule 62-297.310(9), F.A.C.]

B.10. Test Methods: Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above method is described in Appendix A of 40 CFR 60 and is adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the EPCHC. [Rules 62-204.800, F.A.C.; and Appendix A of 40 CFR 60]

MONITORING REQUIREMENTS

B.11. The permittee shall operate and maintain the measuring devices used for determining the air pressure differential (Delta P) across the baghouses according to the manufacturers' manuals. The pressure differential shall be recorded on a daily basis. [Rule 62-4.070(3), F.A.C.]

RECORDS AND REPORTS

B.12. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the following: [Rule 62-297.310(10), F.A.C.]

A) The material handled during the test.
B) The process rate during the test
C) For EU Nos. 100, 101, 102, and 105, the test report shall indicate the point on the emission unit at which the emissions were observed.
D) The pressure drop across the baghouse during testing.
E) For the pneumatic loading of silos, include the maximum tanker/line pressure (psig) registered during the test and the resulting loading rate (ton/hr) at that pressure.

B.13. Operational Data: The permittee shall maintain monthly records for each storage silo loading operation. The records shall be maintained onsite for at least three years and shall be made available to any local, state, or federal air pollution agency upon request. The records shall include, but are not limited to, the following information: [Rule 62-4.070(3) and 62-4.160(14), F.A.C.]

A) Day, Month
B) Emission Unit Number
C) Monthly summary of the type and amount of materials received (pounds or tons). Maintain separate records for each silo.
D) The maximum air pressure achieved during each tanker unloading.
E) Record the pressure drop across each baghouse at least once per day for each day the baghouse is in use as specified in Specific Condition No. B.11.
F) Rolling 12-month total of C) above.