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Sent by Electronic mail – Read Receipt Requested

John Maneth
Plant Manager
Building Materials Manufacturing Corp.
5138 Madison Ave.
Tampa, FL 33619

Re: Project No. 0570056-042-AC
Building Materials Manufacturing Corp.
Modify the Material Handling Operations and Blow Stills

Dear Mr. Maneth:

On June 20, 2018, you submitted an application to increase the minimum operating temperature of the afterburner associated with the blow stills, to replace three baghouses, and to increase the hourly material handling rates. Your existing facility is located in Hillsborough County at 5138 Madison Ave., Tampa, FL 33619.

Enclosed are the following documents: the Written Notice of Intent to Issue Air Permit; the Public Notice of Intent to Issue Air Permit; the Technical Evaluation and Preliminary Determination; and the Draft Permit with Appendices. The Public Notice of Intent to Issue Air Permit is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project.

If you have any questions, please contact Lora Webb or Diana M. Lee, P.E., Chief, Air Permitting, at (813) 627-2600 or by email at webbl@epchc.org or lee@epchc.org.

Executed in Tampa, Florida.

Sincerely,

Janet L. Dougherty
Executive Director

Enclosures

JLD/LAW/law

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

In the Matter of an
Application for Air Permit by:

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

Authorized Representative:
John Maneth, Plant Manager

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

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

Facility Location: Building Materials Manufacturing Corp. operates the existing facility, which is located in Hillsborough County at 5138 Madison Ave. in Tampa, Florida.

Project: The applicant requested to increase the minimum operating temperature of the afterburner associated with the blow stills, to replace three baghouses, and to increase the hourly material handling rates. Details of the project are provided in the application and the enclosed Technical Evaluation and Preliminary Determination.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, and 62-210 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Environmental Protection Commission of Hillsborough County is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical/mailing address is: 3629 Queen Palm Dr., Tampa, Florida 33619. The Permitting Authority's telephone number is 813-627-2600.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the draft permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

Notice of Intent to Issue Permit: The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that the project will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a final permit in accordance with the conditions of the draft permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Public Notice: Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at above address or phone number. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

Comments: The Permitting Authority will accept written comments concerning the draft permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of the 14-day period. If written comments

received result in a significant change to the draft permit, the Permitting Authority shall revise the draft permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this written notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this written notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. A petition for administrative hearing must contain the information set forth below and must be filed (received) with the with the Legal Department of the EPC at 3629 Queen Palm Drive, Tampa, Florida 33619, Phone 813-627-2600, Fax 813-627-2602 before the deadline.

The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, any email address, telephone number and any facsimile number of the petitioner; the name, address any email address, telephone number, and any facsimile number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this written notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

Executed in Tampa, Florida.

ENVIRONMENTAL PROTECTION
COMMISSION OF HILLSBOROUGH COUNTY

for

Janet L. Dougherty
Executive Director

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this written notice of Intent to Issue Air Permit package (including the Public Notice of Intent to Issue Air Permit, the Technical Evaluation and Preliminary Determination and the draft permit with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with read 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.

Jeannette Figari 7/20/18

Clerk Date

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY
Draft Air Permit No. 0570056-042-AC
Building Materials Manufacturing Corp.
Hillsborough County, FL

Applicant: The applicant for this project is Building Materials Manufacturing Corp.. The applicant's authorized representative and mailing address is: John Maneth, Plant Manager, 5138 Madison Ave. in Tampa, FL.

Facility Location: The facility operates the existing asphalt roofing shingles manufacturing facility, which is located in Hillsborough County at 5138 Madison Ave. in Tampa, FL.

Project: This permit increases the minimum operating temperature of the afterburner associated with the asphalt oxidation stills; authorizes the replacement of three baghouses; and increases the hourly material handling rates at the asphalt roofing shingles manufacturing facility. The facility remains a Synthetic Minor source of emissions.

Permitting Authority: Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Permitting Authority responsible for making a permit determination for this project is the Environmental Protection Commission of Hillsborough County. The Permitting Authority's physical/mailing address is: 3629 Queen Palm Dr., Tampa, FL 33619. The Permitting Authority's phone number is 813-627-2600.

Project File: A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the physical address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, the Technical Evaluation and Preliminary Determination, the application and information submitted by the applicant (exclusive of confidential records under Section 403.111, F.S.). Interested persons may contact the Permitting Authority's project engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site: https://fldep.dep.state.fl.us/air/emission/apds/default.asp.

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air construction permit to the applicant for the project described above. The applicant has provided reasonable assurance that the project will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

Comments: The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. A petition for administrative hearing

must contain the information set forth below and must be filed (received) with the Legal Department of the EPC at 3629 Queen Palm Drive, Tampa, Florida 33619, Phone 813-627-2600, Fax 813-627-2602 before the deadline The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, any email address, telephone number and any facsimile number of the petitioner; the name, address any email address, telephone number, and any facsimile number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation: Mediation is not available in this proceeding.

TECHNICAL EVALUATION

&

PRELIMINARY DETERMINATION

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

PROJECT
Project No. 0570056-042-AC
Application for Minor Source Air Construction Permit
Modify the Material Handling Operations and the Oxidation Plant

COUNTY
Hillsborough County, Florida

PERMITTING AUTHORITY
Environmental Protection Commission of Hillsborough County
3629 Queen Palm Dr.
Tampa, FL 33619

July 20, 2018

1. GENERAL PROJECT INFORMATION

Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control – General Provisions); 62-210 (Stationary Sources – General Requirements); 62-212 (Stationary Sources – Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources – Emissions Monitoring). Specifically, air construction permits are required pursuant to Chapters 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations in Rule 62-204.800, F.A.C.

Glossary of Common Terms

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

Facility Description and Location

Building Materials Manufacturing Corp. is an existing asphalt roofing shingles manufacturing operation, which is categorized under Standard Industrial Classification Code No. 2952 – Asphalt Felts and Coating. The existing facility is located in Hillsborough County at 5138 Madison Ave., Tampa, FL 33619. The UTM coordinates of the facility are Zone 17, 362.5 km East, and 3087.1 km North. This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to Ambient Air Quality Standards (AAQS), except for ozone. Hillsborough County is designated as an air quality maintenance area for ozone.

Facility Regulatory Categories

- The facility is not a major source of hazardous air pollutants (HAP).
- 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.
- The facility does operate units subject to the NSPS of 40 CFR 60.
- The facility does operate units subject to the NESHAP of 40 CFR 63. However, the State of Florida has not adopted the NESHAP that the facility is subject to.

Project Description

As requested by the permittee, 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). The new dust collectors will be Donaldson Torit Powercore, Model No. CPV-4, dust collectors, or equivalent. 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. This project results in an increase in facility-wide potential emissions from 88.1 tons to 91.4 tons/year.

The following existing emissions units (EU) will be affected by this project.

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

Processing Schedule

June 20, 2018 - Received the application for a minor source air pollution construction permit.
Not Applicable - Requested additional information.
June 20, 2018 - Application Complete.

2. DEPARTMENT REVIEW

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.

In addition to the requested changes, 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. The potential emissions from EU Nos. 004 and 013 are based on an emission factor of 0.99 lb/ton of asphalt charged to the stills as specified in 40 CFR 60 Subpart UU and as requested by the permittee in order to limit the potential emissions. Therefore, in order to demonstrate compliance with the requirements of 40 CFR 60.472(b)(3), the permit now limits the tons of asphalt charged to the stills.

The above changes result in an increase in facility-wide potential particulate matter emissions from 88.1 tons/year to 91.4 tons/year. The potential PM emissions from the asphalt oxidation stills (EU 004 and 103) remain at 54.2 tons/year based on a throughput of 109,500 tons/year of asphalt and an emission factor of 0.99 lb/ton of asphalt. The potential PM emissions from the silos (EU 006, 007, and 008) are calculated to be 2.0 tons/year per silo based on the 2,700 dscf airflow rate of the dust collectors, 8,760 hours of operation, and a grain loading standard of 0.02 gr/dscf.

In addition, the potential PM emissions from the Sand Unloading Operation (EU 100), Storage Silo No. 3 (EU 101), the Truck/Railcar Unloading (EU 102), and the Granule Receiving and Storage (EU 105) are calculated to be 0.2 tons/year, 0.06 tons/year, 0.5 tons/year, and 1.3 tons/year, respectively. The emissions are based on an emission factor of 0.003 lb/ton from AP 42 Ch. 11.19.2-2, a throughput and a specified number of transfer points for each emission unit, and a 50% control efficiency for the use of partial enclosures.

The facility is subject to 40 CFR 60 Subpart UU – Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture and 40 CFR 63 Subpart AAAAAAA – NESHAP: Asphalt Processing and Asphalt Roofing Manufacturing. However, the State of Florida had not adopted 40 CFR 63 Subpart AAAAAAA, so it is only referenced in the facility description. The facility is also subject to Rule 62-296.711, F.A.C. - Materials Handling, Sizing, Screening, Crushing and Grinding Operations; Rule 62-296.712, F.A.C. - Miscellaneous Manufacturing Process Operations; and Ch. 1-3, Rules of the EPCHC.

Summary of Emissions

Particulate Matter (PM) Emissions

EU No.	Description	Potential Emissions (TPY)	Actual Emissions (TPY)	Increase in Emissions (TPY)	Allowable Emissions
004/103	Asphalt Oxidizing Plant: South and North Stills	54.2	4.5	49.7	0.99 lb/ton of asphalt
006	West Limestone Storage Silo	2.0	0.1	1.9	0.02 gr/dscf and 0% opacity
007	Sand Storage Silos/Elevator System - West	2.0	0.1	1.9	0.02 gr/dscf and 0% opacity
008	East Limestone Storage Silo	2.0	0.2	1.8	0.02 gr/dscf and 0% opacity
100	Sand Truck Unloading	0.2	0.2	0	1% opacity
101	Storage Silo No. 3	0.06	0.02	0.04	1% opacity
102	Truck/Railcar Unloading - East	0.5	0.1	0.4	1% opacity
105	Granule Receiving and Storage	1.3	0.5	0.8	1% opacity

- The actual emissions are based on the average of 2016 and 2017 AOR data.
- The combined potential PM emissions from EU Nos. 004 and 103 are based on an emission factor of 0.99 lb/ton of asphalt charged to the blow stills and a throughput of 109,500 tons of asphalt per year.
- The potential PM emissions from EU Nos. 006, 007, and 008 are based on the dust collector airflow rate of 2,700 dscf, 8,760 hours of operation, and a grain loading standard of 0.02 gr/dscf.
- The potential PM emissions from EU No. 100 are based on an emission factor of 0.003 lb/ton from AP 42 Ch. 11.19.2-2, a throughput of 87,000 tons/year, three transfer points, and a 50% control efficiency for partial enclosures.
- The potential PM emissions from EU No. 101 are based on an emission factor of 0.003 lb/ton from AP 42 Ch. 11.19.2-2, a throughput of 81,000 tons/year, one transfer point, and a 50% control efficiency for a partial enclosure.
- The potential PM emissions from EU No. 102 are based on an emission factor of 0.003 lb/ton from AP 42 Ch. 11.19.2-2, a throughput of 240,000 tons/year, three transfer points, and a 50% control efficiency for partial enclosures.
- The potential PM emissions from EU No. 105 are based on an emission factor of 0.003 lb/ton from AP 42 Ch. 11.19.2-2, a throughput of 438,000 tons/year, four transfer points, and a 50% control efficiency for partial enclosures.
- The facility-wide PM emissions are calculated to be 91.4 tons/year.

Local Requirements
Rules of the EPCHC, Chapter 1-3 - Stationary Air Pollution and Ambient Air Quality Standards

State Requirements
Rule 62-296.320, F.A.C. - General Pollutant Emission Limiting Standards
Rule 62-296.700, F.A.C. - Reasonably Available Control Technology (RACT) Particulate Matter
Rule 62-296.711, F.A.C. - Materials Handling, Sizing, Screening, Crushing and Grinding Operations
Rule 62-296.712, F.A.C. - Miscellaneous Manufacturing Process Operations;

Federal NSPS Provisions
40 CFR 60 Subpart A – General Provisions

40 CFR 60 Subpart UU – Standards of Performance for Asphalt Processing and Asphalt Roofing Manufacture
40 CFR 63 Subpart AAAAAAA – NESHAP: Asphalt Processing and Asphalt Roofing Manufacturing. However, the State of Florida had not adopted 40 CFR 63 Subpart AAAAAAA.

Other Draft Permit Requirements
NA

3. PRELIMINARY DETERMINATION

The EPCHC makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Lora Webb is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting Lora Webb or Diana M. Lee, P.E. Chief, Air Permitting, at (813) 627-2600 or by email at webbl@epchc.org or lee@epchc.org.

COMMISSION
Lesley "Les" Miller, Jr., Chair
Victor D. Crist, Vice-Chair

Ken Hagan
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Pat Kemp
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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 draft 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.

_____ _____

Clerk Date

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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

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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.

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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.

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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

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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.]

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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.]

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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 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]

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; ~~and~~ 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	~~66.1~~ 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

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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).

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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

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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.

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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.	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
101	80 ton/hour of sand and coal slag	8,760

DRAFT

	and 81,000 tons/12 month period of sand and coal slag	
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.]

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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]

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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.

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