TECHNICAL EVALUATION

AND

PRELIMINARY DETERMINATION

FOR

JAMES HARDIE BUILDING PRODUCTS, INC.

Hillsborough County

Construction Permit

Application Number

0570460-031-AC

Environmental Protection Commission of

Hillsborough County

Tampa, FL

January 21, 2014

I. Project Description

A. Applicant: Scott Monahan
Plant Manager
James Hardie Building Products, Inc.
809 South Woodrow Wilson Road
Plant City, FL 33566

B. Engineer: Kenneth E. Given, P.E.
333 N Falkenburg Rd., Unit B-214
Tampa, FL 33619
P.E. No.: 23023

C. Project and Location:

This permit authorizes the construction of a new Inorganic Mineral Processing (IMP) Plant (aka Perlite Plant) at the James Hardie facility. The project has been assigned Source Classification Code No. 3-05-018-99 (Perlite Manufacturing), 3-99-999-99 (Miscellaneous Industrial Process) and 3-05-102-02 (Bulk Materials Storage Bins). The Standard Industrial Code for the project is No. 3272 (Stone, Clay, Glass and Concrete Products). The project is located at 809 South Woodrow Wilson Road, Plant City, FL, 33563. UTM Coordinates of the location are 17 – 387.13 E and 3089.63 N.

D. Process and Controls:

The facility is a formed cement fiber product manufacturing facility comprised of two distinct operations: building panel production (Sheet Plant) and large drainage pipe production (Pipe Plant). The new Perlite Plant will be built on the site of the old Pipe Plant, which has been shut down since 2008. The following are the proposed constructions/modifications under this AC project:

Perlite Plant:

- Construction of a 200-ton Inorganic Mineral (IM)/Perlite ore storage silo. Trucks will pneumatically unload the IM (perlite) ore to the storage silo. Emission from the truck unloading operation will be controlled by a 750 ACFM dust collector located on the top of the silo. The requested allowable emission rate for the baghouse is 0.03 gr/dscf.

- Construction of a Perlite Plant Furnace Line 1, will be consisting of: an enclosed preheater feed conveyor, preheater (electric), bucket elevator, discharge chute, furnace hopper & feeder, furnace (electric), cooling duct, a common 200 ton product silo, and a product dense phase conveyor that will convey material to the day bin for Sheet Machine No. 4 and possibly to other existing sheet machines. The cooling duct is equipped with a diverter valve, which would allow material to be transferred to a small R&D storage silo. All of the operations will have pickup points and will be vented to a 10,000 ACFM baghouse equipped with a bag leak detector. The requested allowable emission rate for the baghouse is 0.02 gr/dscf.

- Construction of a Perlite Plant Furnace Line 2, will consist of: an enclosed preheater feed conveyor, preheater (electric), bucket elevator, discharge chute, furnace hopper & feeder, furnace (electric), cooling duct, a common 200-ton product silo, a product dense phase conveyor that will convey material to either the day bin for Sheet Machine No. 4 and possibly to other existing sheet machines, a supersack fill station equipped with a filter receiver, a surge hopper and filling station or an partially enclosed truck loading station silo and loading spout. The truck loading station will be built later under Phase Two, which as indicated in the permit application that will be built within 4 years of the permit issuance. The cooling duct is equipped with a diverter valve which will allow material to be transferred to a small R&D storage silo. All of the operations will have pickup points that will be vented to a 10,000 ACFM baghouse equipped with a bag leak detector. The requested allowable emission rate for the baghouse is 0.02 gr/dscf.

Sheet Machine No. 4:

- A new Sheet Machine No. 4 will be constructed at the old pipe plant location. This new sheet machine will be 5 ft. wide and will have the capacity to produce sheets similar to the three existing sheet machines, but will also be able to produce trim products. The annual production capacity will be 220 million square ft. The total sand, cement and additives usage will be 192,632 tons/yr.

- The raw materials (sand, cement and an additional additive) will be transported on-site by trucks to one of the three existing silos. Once on-site, the cement and additive will be loaded into their respective silo, pneumatically. The PM emissions from the loading of the cement and additive will be controlled using baghouses.

- The sand will be unloaded into a hopper and transferred to the existing Sand Silo #3 by an enclosed bucket elevator, to a chute to a covered conveyor. PM emissions from the sand silo, bucket elevator and chute/covered conveyor will be controlled with a baghouse. The sand will then be transferred to Ball Mill No. 3 through a partially covered conveyor, and then mixed with water to be pumped into tanks and eventually to the mixer. The bucket elevator will either be upgraded or replaced to increase the operating rate from 75-80 tph to 150 tph.

- A new 625-ton sand storage silo (Sand Silo #4) and associated material handling equipment and a fourth ball mill will be constructed. The operations will consist of: a new chute from the existing bucket elevator to a new covered conveyor to Sand Silo #4, and a covered conveyor from Sand Silo #4 to the new Ball Mill No. 4. In the ball mill, water will be added. The rated capacity of Ball Mill No. 4 will be 18 tph.

- The silica sand will be grounded to the correct gradation by one of the two ball mills before mixing. The additives and cement will be transferred from the silos to the production equipment via enclosed pneumatic piping that will empty into 4 receiving hoppers, each equipped with a dust collector. These dust collectors will be located inside the production building and will vent inside the building. From the hoppers, the cement and additive will dropped in pre-set quantities into the mixer with the sand slurry. Any particulate emissions from the mixer will be controlled by filter socks, which will vent into the building. Wood pulp will be introduced off of hardened bales where it will be unrolled into the slurry and ground into

needed size. These raw materials will be wet-mixed and formed into sheets or planks. After the boards are formed, and prior to stacking, they will be coated to prevent sticking during curing. The boards will be placed in stacks by a vacuum stacker. The emissions from the uncontrolled vacuum stacker will vent inside the building. After stacking, the boards will be heat-cured under pressure in the autoclaves located outside the production building, using steam generated by two existing boilers which are limited to fire natural gas exclusively.

Finishing Line:

A new finishing line (trim sanding/smoothing operation) will be constructed at the old pipe plant and is planned to be done in two construction phases. As indicated in the AC permit application, Phase 1 is expected to be built within 2 years of the permit issuance and Phase 2 is expected to be completed within 4 years of the permit issuance. The trim sanding/smoothing operation can be bypassed for the normal sheet/panel products.

- Phase One: Construction of up to four Trim Edge Sanders (aka Trim Edge Smoothing) on Sheet Machine No. 4 Finishing Line. All sanding operations will have pickup points and will be vented to a 75,000 ACFM baghouse equipped with a bag leak detector. The requested allowable emission rate for the baghouse is 0.015 gr/dscf.

- Phase Two: construction of one Trim Surface Sander (aka Trim Surface Smoothing) on Sheet Machine No. 4 Finishing Line. All sanding operations will have pickup points and will be vented to a 25,000 ACFM baghouse equipped with a bag leak detector. The requested allowable emission rate for the baghouse is 0.015 gr/dscf.

Coating Operation:

In the priming process, the panels will first travel along a conveyor through a Moisture Dryer (steam heated) to a sealer coater to a 6 MMBtu/hr natural gas sealer dryer. They will enter the painting chamber where paint will flow across the panels. The excess paint will be collected in a reservoir. Any debris collected will be separated from the paint and the paint will be re-circulated to the applicator for reapplication. The panels/planks and trim will be dried in a 12 MMBtu/hr natural gas dryer and travel through an ink jet printer prior to stacking. There will be no increase in potential VOC emissions due to this project since there are no VOCs in either the sealer or primers to be used in the coating operation.

Modification of current Emission Units (EUs):

- 500-ton Cement Silo #2 (EU 024): The existing dust collector will be either refurbished or replaced with either the same model or a dust collector of similar design with the same air flow and gr/dscf.

- 160-ton Additive Silo #2 (EU 026): The existing dust collector will be either refurbished or replaced with either the same model or a dust collector of similar design with the same air flow and gr/dscf.

- 33.5 MMBtu/hr natural gas Pipe Boiler #1 (EU 028): The existing boiler will be either

refurbished or replaced with either the same model or a boiler of similar design with the same heat input rate.

- 33.5 MMBtu/hr natural gas Pipe Boiler #2 (EU 029): The existing boiler will be either refurbished or replaced with either the same model or a boiler of similar design with the same heat input rate.

- Sand Silo #1 (EU 002): The existing dust collector will be either refurbished or replaced with either the same model or a dust collector of similar design with the same air flow and gr/dscf.

- Sand Silo #2 (EU 022): The existing dust collector will be either refurbished or replaced with either the same model or a dust collector of similar design with the same air flow and gr/dscf.

- Additive Silo #1 (EU 003): The existing dust collector will be refurbished or replaced with either the same model or a dust collector of similar design with the same air flow and gr/dscf.

- 25.1 MMBtu/hr natural gas Sheet Boiler #1 (EU 004): The existing boiler will be either refurbished or replaced with either the same model or a boiler of similar design with the same heat input rate.

The facility is currently operating under Permit No. 0570460-027-AF. The current facility-wide PTE for PM and VOC emissions are 33.8 TPY and 49.8 TPY, respectively. There will be no increase in VOC emissions due to this project since there are no VOCs in either the sealer or primers to be used in the coating operation according to the provided proprietary information (MSDS).

Under this AC project, the facility-wide PTE for PM emissions from all the regulated EUs will increase to 84.9 TPY, of which 81.7 TPY is associated with this AC construction/modification. This facility is subject to 40 CFR 60 Subpart OOO for Standards of Performance for Nonmetallic Mineral Processing Plants and also subject to 40 CFR 60 Subpart UUU for the Calciners and Dryers in the Mineral Processing Plant. In addition, the facility is subject to PM-RACT (Rule 62-296.712, F.A.C.), and therefore, "Operation and Maintenance" plans are required for the baghouses. A 5% opacity standard applies to all of the material handling units pursuant to Rule 62-296.712, F.A.C., and Chapter 1-3.52(2) Rules of the EPC. All the existing (5) boilers at the facility including the (3) boilers associated with this AC project, are subject to 40 CFR 60, Subpart Dc.

Currently, the facility has activities that are exempted from permitting, pursuant to Rule 62-210.300(3)(b), F.A.C., which include two (2) emergency diesel generators, eight (8) day bins with individual dust collectors that vent indoors, three (3) stacker baghouses on the sheet plant, paint line preheaters and dryers, periodic pipe flattening activities used on scrap pieces, and five (5) fuel storage tanks, as well as a natural gas fired curing oven.

Also, as requested in this permit application, the following activities are being exempted from permitting; the Perlite Day Bin, a preheater/oven for Sheet Machine No. 4 and five (5)

stacking/sweeping activities with baghouses that vent inside of the building. Therefore, these activities will be listed in this permit as exempt activities pursuant to Rule 62-210.300(3)(b), F.A.C.

E. Application Information:

Received on: December 20, 2013
Information Requested: NA
Application Complete: December 20, 2013

II. Rule Applicability

This project is subject to the preconstruction review requirements of Chapter 403, Florida Statutes, Chapters, 62-204, 62-210, 62-212, 62-296, and 62-297, Florida Administrative Code (F.A.C.) and Chapter 1-3 of the Rules of the Environmental Protection Commission of Hillsborough County.

This project is subject to the requirements of Rule 62-212.300, Sources Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements, F.A.C., since the project is not exempt from the permit requirements in Rule 62-210.300, F.A.C.

This project is not subject to the requirements of Rule 62-212.400, Prevention of Significant Deterioration, F.A.C. or Rule 62-212.500, New Source Review for Nonattainment Areas, F.A.C., since the facility is minor by state definition.

This project is subject to the requirements of Rule 62-296.320, F.A.C., General Pollutant Emission Limiting Standards, since the facility is a source of particulate matter and a potential source of odors.

This project is not subject to the requirements of Rule 62-296.401 through 62-296.470, Specific Emission Limiting and Performance Standards, F.A.C., since there is no applicable source specific category in this rule.

This project is not subject to the requirements of Rule 62-296.500, Volatile Organic Compounds and Nitrogen Oxide Reasonably Available Control Technology, F.A.C., since there is no applicable source specific category in this rule.

This project is not subject to the requirements of Rule 62-296.600, Lead Reasonably Available Control Technology, F.A.C., since there is no applicable source specific category in this rule.

This project is subject to the requirements of Rule 62-296.712, Miscellaneous Manufacturing Process Operations, F.A.C., since the PM emissions from the new manufacturing operation are greater than 5 lb/hr and 15 tons/yr.

This project is subject to the requirements of Rule 62-204.800, Federal Regulations Adopted by Reference, F.A.C., since the facility is subject to 40 CFR 60, Subpart OOO for Standards of Performance for Nonmetallic Mineral Processing Plants and 40 CFR 60 Subpart UUU for Calciners and Dryers in Mineral Industries.

This project is subject to the requirements of Chapter 84-446, Laws of Florida and Chapter 1-3, Rules of the Environmental Protection Commission of Hillsborough County.

III. Summary of Emissions

Particulate Matter Emissions

Emission Unit (EU) No.	**EU Description**	Potential Emissions (TPY) [d]	Actual Emissions (TPY) [a]	Increase in Emissions (TPY)	Allowable Emissions
002	Sand Silo #1 (w/ 3,240 acfm BH)	2.4	0.4	2.0	0.02 gr/dscf and 5% opacity
003	Additive Silo #1 (w/ 520 acfm BH)	0.4	0.04	0.4	0.02 gr/dscf and 5% opacity
004	Boiler #1 (25.1 MMBtu/hr)	0.8	0.2	0.6	20% opacity
022	Sand Silo #2 (w/ 750 acfm BH)	0.6	0.1	0.5	0.02 gr/dscf and 5% opacity
024	Cement Silo #2 (w/ 1,000 acfm BH)	0.8	[b]	0.8	0.02 gr/dscf and 5% opacity
025	Sand Silo #3 (w/ 1,200 acfm BH)	0.9	0.02	0.9	0.02 gr/dscf and 5% opacity
026	Additive Silo #2 (w/ 1,000 acfm BH)	0.8	[b]	0.8	0.02 gr/dscf and 5% opacity
028	Boiler #4 (33.5 MMBtu/hr)	1.1	[b]	1.1	20% opacity
029	Boiler #5 (33.5 MMBtu/hr)	1.1	[b]	1.1	20% opacity
032 (new)	Perlite Ore Silo (w/ 750 acfm BH)	0.1	[c]	0.1	0.03 gr/dscf and 5% opacity
033 (new)	Perlite Furnace #1 (w/ 10,000 acfm BH)	7.5	[c]	7.5	0.02 gr/dscf and 5% opacity
034 (new)	Perlite Furnace #2 (w/ 10,000 acfm BH)	7.5	[c]	7.5	0.02 gr/dscf and 5% opacity
035 (new)	Trim Edge Sanders (w/ 75,000 acfm BH)	42.2	[c]	42.2	0.015 gr/dscf and 5% opacity
036 (new)	Trim Surface Sanders (w/ 25,000 acfm BH)	14.1	[c]	14.1	0.015 gr/dscf and 5% opacity
037 (new)	Sand Silo #4 for Ball Mill #4 (Sheet Machine #4)	1.4 [e]	[c]	1.4	5% opacity

(a) Actual emissions from existing EUs are based on the average of 2011 and 2012 AOR data.
(b) EUs 024, 026, 028 and 029 have not been in operation. No actual emission data was available.
(c) EUs 032, 033, 034, 035, 036 and 037 will be newly constructed emission units.
(d) The facility-wide PTE for PM emissions from all the regulated EUs will increase to 84.9 TPY, of which 81.7 TPY is associated with this AC construction/modification. Under this AC project, the following activities are being exempted from permitting; the Perlite Day Bin, a preheater/oven for Sheet Machine No. 4 and five (5) stacking/sweeping activities with baghouses that vent inside of the building. Therefore, these activities will be listed in this permit as exempt activities pursuant to Rule 62-210.300(3)(b), F.A.C..

(e) There is no BH for Sand Silo #4 (EU 037). Emissions are estimated using AP-42, Table 11.12-2, Emissions Factor of 0.0021 lb/ton.
Inventory of Title III pollutants is estimated to be less than 10 TPY individually and less than 25 TPY collectively.

IV. Conclusions:

The emission limits proposed by the applicant will meet all of the requirements of Chapters 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C., and Chapter 1-3, Rules of the Commission.

The General and Specific Conditions listed in the proposed permit (attached) will assure compliance with all the applicable requirements of Chapters 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

V. Proposed Agency Action:

Pursuant to Section 403.087, Florida Statutes and Rule 62-4.070, Florida Administrative Code the Environmental Protection Commission of Hillsborough County hereby gives notice of its intent to issue a permit to construct the aforementioned air pollution source in accordance with the draft permit and its conditions as stipulated (see attached).

CERTIFIED MAIL

In the Matter of an
Application for Permit by:

Scott Monahan, Plant Manager
James Hardie Building Products, Inc.
809 South Woodrow Wilson Road
Plant City, FL 33566

File No.: 0570460-031-AC
County: Hillsborough

INTENT TO ISSUE

The Environmental Protection Commission of Hillsborough County (EPC), as delegated by the Florida Department of Environmental Protection (DEP) gives notice of its intent to issue a permit (copy attached) for the proposed project as detailed in the application specified above, for the reasons stated below.

The applicant, James Hardie Building Products, Inc., applied on December 20, 2013 to the EPC for the construction of a new Inorganic Mineral Processing (IMP) Plant (aka Perlite Plant) at the James Hardie Plant City facility located at 809 South Woodrow Wilson Road, Plant City, FL 33563. The facility is a formed cement fiber product manufacturing facility. The facility-wide PTE for PM emissions from all the regulated EUs will increase to 84.9 TPY, of which 81.7 TPY is associated with this AC construction/modification. There will be no increase in PTE VOC emissions due to this project.

The EPC has permitting jurisdiction under Chapter 403 Florida Statutes (F.S.) and Florida Administrative Code (F.A.C.) Chapters 62-4 and 62-210. The project is not exempt from permitting procedures. The EPC has determined that an air pollution construction permit is required to commence or continue operations at the described facility.

The EPC intends to issue this permit based on the belief that reasonable assurances have been provided to indicate that operation of the source will comply with the appropriate provisions of Florida Administrative Code (F.A.C.) Chapters 62-204 through 62-297 and 62-4.

Pursuant to Section 403.815 and 403.0872, F.S. and Rules 62-103.150 and 62-210.350(3), F.A.C., you (the applicant) are required to publish at your own expense the enclosed Notice of Intent to Issue Permit. The notice shall be published one time as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication

in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit. If you are uncertain that a newspaper meets these requirements, please contact the EPC at the address or telephone number listed below. **The applicant shall provide proof of publication to the EPC, Air Permitting Section, at 3629 Queen Palm Dr., Tampa, Florida 33619 (Phone 813-627-2600 - FAX 813-627-2660) within 7 (seven) days of publication.** Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit pursuant to Rule 62-103.150(6), F.A.C.

The EPC will issue the final permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to Section 120.569 and 120.57 F.S. before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Legal Department of the EPC at 3629 Queen Palm Dr., Tampa, Florida 33619, Phone 813-627-2600, Fax 813-627-2602. Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 (fourteen) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), however, any person who asked the EPC for notice of agency action may file a petition within 14 (fourteen) 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. 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 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 EPC's action is based is required to 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, and telephone number of the petitioner and the name, address, and telephone number of each petitioner's representative, if any, which shall be the address for service purposes during the course of the proceedings; and an explanation of how the petitioner's substantial interests will be affected by the EPC's determination;

(c) A statement of how and when the petitioner received notice of the EPC action;

(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 EPC's proposed action;

(f) A statement of specific rules or statutes that the petitioner contends requires reversal or

modification of the EPC'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 petitioner wishes the EPC to take with respect to the EPC's proposed action.

A petition that does not dispute the material facts upon which the EPC'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 EPC's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the EPC on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation under section 120.573, F.S. is not available in this proceeding.

This action is final and effective on the date filed with the Clerk of the EPC unless a petition is filed in accordance with above. Upon the timely filing of a petition, this order will not be effective until further order of the EPC.

In addition to the above, a person subject to regulation has a right to apply to the Department of Environmental Protection for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542, F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, FL 32399-3000. The petition must specify the following information:

(a) The name, address, and telephone number of the petitioner,

(b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any,

(c) Each rule or portion of a rule from which a variance or waiver is requested,

(d) The citation to the statute underlying (implemented by) the rule identified in (c) above,

(e) The type of action requested,

(f) The specific facts that would justify a variance or waiver for the petitioner,

(g) The reason by the variance or waiver would serve the purposes of the underlying statute (implemented by the rule), and

(h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of the those terms is defined in Section 120.542(2), F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of United States Environmental Protection Agency and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Any person listed below may request to obtain additional information, a copy of the application (except for information entitled to confidential treatment pursuant to Section 403.111, F.S.), all relevant supporting materials, and all other materials available to the EPC that are relevant to the permit decision. Interested persons may contact Sterlin Woodard, P.E., at the above address or call (813) 627-2600, for additional information.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statues, by filing a notice of appeal under rule 9.110 of the Florida rules of Appellate Procedure with the EPC's Legal Office at 3629 Queen Palm Dr., Tampa, Florida 33619 and with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, 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 thirty days after this order is filed with the clerk of the Department.

Executed in Tampa, Florida

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY

_____

Richard D. Garrity, Ph.D.
Executive Director

cc: Kenneth E. Given, P.E., Clean Air Consulting, Inc.
Jim Estler, Q.E.P., Clean Air Consulting, Inc. (e-mail)

CERTIFICATE OF SERVICE

The undersigned duly designated clerk hereby certifies that this INTENT TO ISSUE and all copies were mailed before the close of business on _____ to the listed persons.

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

_____ _____
Clerk Date

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY
NOTICE OF INTENT TO ISSUE PERMIT

The Environmental Protection Commission of Hillsborough County (EPC), as delegated by the Florida Department of Environmental Protection (DEP) gives notice of its intent to issue Air Pollution Permit No. 0570460-031-AC to James Hardie Building Products, Inc., for the construction of a new Inorganic Mineral Processing (IMP) Plant (aka Perlite Plant). The facility is a formed cement fiber product manufacturing facility. Emissions from the new Perlite Plant will be controlled by the use of baghouses. The James Hardie Plant City facility is located at 809 South Woodrow Wilson Road, Plant City, FL 33563.

A Best Available Control Technology (BACT) determination was not required.

The EPC will issue the Final permit with the conditions of the DRAFT permit unless a timely petition for an administrative hearing is filed pursuant to Sections 120.569 and 120.57, F.S. before the deadline for filing a petition. The procedures for petitioning for hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Legal Department of the EPC at 3629 Queen Palm Dr., Tampa, Florida 33619, Phone 813-627-2600, Fax 813-627-2602. Petitions filed by the permit applicant or any of the parties listed below must be filed within 14 (fourteen) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 (fourteen) days of publication of the public notice or within 14 (fourteen) days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), however, any person who asked the EPC for notice of agency action may file a petition within 14 (fourteen) 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. 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 will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the F.A.C.

A petition that disputes the material facts on which the EPC's action is based is required to 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, and telephone number of the petitioner, and the name, address, and telephone number of each petitioner's representative, if any, which shall be the address for service purposes during the course of the proceedings; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;

(c) A statement of how and when petitioner received notice of the EPC action;

(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 EPC proposed action;

(f) A statement of specific rules or statutes the petitioner contends requires reversal or modification of the EPC's proposed action; and

(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the EPC to take with respect to the EPC's proposed action.

A petition that does not dispute the material facts upon which the EPC'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.

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

Mediation under section 120.573, F.S. is not available in this proceeding.

This action is final and effective on the date filed with the Clerk of the EPC unless a petition is filed in accordance with above. Upon the timely filing of a petition this order will not be effective until further order of the EPC.

Any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statues, by filing a notice of appeal under rule 9.110 of the Florida rules of Appellate Procedure with the EPC's Legal Office at 3629 Queen Palm Dr., Tampa, Florida 33619 and with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, 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 thirty days after this order is filed with the clerk of the Department.

The complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Environmental Protection Commission of Hillsborough County, 3629 Queen Palm Dr., Tampa, FL 33619. The complete project file includes the proposed Permit, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Sterlin Woodard, P.E., at the above address, or call 813-627-2600, for additional information. Any written comments filed shall be available for public inspection. If written comments received result in a significant change in the proposed agency action, the EPC shall revise the proposed permit and require, if applicable, another Public Notice.

ENVIRONMENTAL PROTECTION COMMISSION OF
HILLSBOROUGH COUNTY, as Delegated by

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF PERMIT

Scott Monahan
Plant Manager
James Hardie Building Products, Inc.
809 South Woodrow Wilson Road
Plant City, FL 33566

Dear Mr. Monahan:

Enclosed is Permit Number 0570460-031-AC for construction of a new Inorganic Mineral Processing (IMP) Plant (aka Perlite Plant), issued pursuant to Section 403.087, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the EPC in the Legal Department at 3629 Queen Palm Dr, Tampa, FL 33619; 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 of Appeal must be filed within 30 days from the date this Notice is filed with the clerk of the EPC.

Executed in Tampa, Florida.

Sincerely,

Richard D. Garrity, Ph.D.
Executive Director

RDG/KRZ/krz

cc: Kenneth E. Given, P.E., Clean Air Consulting, Inc.
Jim Estler, Q.E.P., Clean Air Consulting, Inc. (via email)

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT and all copies were mailed before the close of business on _____ to the listed persons.

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

_____ _____
Clerk Date

PERMITTEE:
James Hardie Building Products, Inc.
809 South Woodrow Wilson Road
Plant City, FL 33566

PERMIT/CERTIFICATION
Permit No.: 0570460-031-AC
County: Hillsborough
Expiration Date: January 21, 2018
Project: Construction of a New Perlite Plant

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rules 62-204, 62-210, 62-212, 62-296, 62-297, and 62-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the EPC and made a part hereof and specifically described as follows:

This permit authorizes the construction of a new Inorganic Mineral Processing (IMP) Plant (aka Perlite Plant) at the James Hardie Plant City facility located at 809 South Woodrow Wilson Road, Plant City, FL 33563. The facility is a formed cement fiber product manufacturing facility comprised of two distinct operations: building panel production (Sheet Plant) and large drainage pipe production (Pipe Plant). The new Perlite Plant will be built on the site of the old Pipe Plant, which has been shut down since 2008. The following are the proposed constructions/modifications under this air construction (AC) project:

Perlite Plant:

- Construction of a 200-ton Inorganic Mineral (IM)/Perlite ore storage silo (new EU 032). Trucks will pneumatically unload the IM (perlite) ore to the storage silo. Emission from the truck unloading operation will be controlled by a 750 ACFM dust collector located on the top of the silo.

- Construction of a Perlite Plant Furnace Line 1 (new EU 033), will be consisting of: an enclosed preheater feed conveyor, preheater (electric), bucket elevator, discharge chute, furnace hopper & feeder, furnace (electric), cooling duct, a common 200 ton product silo, and a product dense phase conveyor that will convey material to the day bin for Sheet Machine No. 4 and possibly to other existing sheet machines. The cooling duct is equipped with a diverter valve, which would allow material to be transferred to a small R&D storage silo. All of the operations will have pickup points and will be vented to a 10,000 ACFM baghouse equipped with a bag leak detector.

- Construction of a Perlite Plant Furnace Line 2 (new EU 034), will consist of: an enclosed preheater feed conveyor, preheater (electric), bucket elevator, discharge chute, furnace hopper & feeder, furnace (electric), cooling duct, a common 200-ton product silo, a product dense phase conveyor that will convey material to either the day bin for Sheet Machine No. 4 and possibly to other existing sheet machines, a supersack fill station equipped with a filter receiver, a surge hopper and filling station or an partially

enclosed truck loading station silo and loading spout. The truck loading station will be built later under Phase Two, which as indicated in the permit application that will be built within 4 years of the permit issuance. The cooling duct is equipped with a diverter valve which will allow material to be transferred to a small R&D storage silo. All of the operations will have pickup points that will be vented to a 10,000 ACFM baghouse equipped with a bag leak detector.

Sheet Machine No. 4:

- A new Sheet Machine No. 4 will be constructed at the old pipe plant location. This new sheet machine will be 5 ft. wide and will have the capacity to produce sheets similar to the three existing sheet machines, but will also be able to produce trim products. The annual production capacity will be 220 million square ft. The total sand, cement and additives usage will be 192,632 tons/yr.

- The raw materials (sand, cement and an additional additive) will be transported on-site by trucks to one of the three existing silos. Once on-site, the cement and additive will be loaded into their respective silo, pneumatically. The PM emissions from the loading of the cement and additive will be controlled using baghouses.

- The sand will be unloaded into a hopper and transferred to the existing Sand Silo #3 (EU 025) by an enclosed bucket elevator, to a chute to a covered conveyor. PM emissions from the sand silo, bucket elevator and chute/covered conveyor will be controlled with a baghouse. The sand will then be transferred to Ball Mill No. 3 through a partially covered conveyor, and then mixed with water to be pumped into tanks and eventually to the mixer. The bucket elevator will either be upgraded or replaced to increase the operating rate from 75-80 tph to 150 tph.

- A new 625-ton Sand Silo #4 (new EU 037) and associated material handling equipment and a fourth ball mill will be constructed. The operations will consist of: a new chute from the existing bucket elevator to a new covered conveyor to Sand Silo #4, and a covered conveyor from Sand Silo #4 to the new Ball Mill No. 4. In the ball mill, water will be added. The rated capacity of Ball Mill No. 4 will be 18 tph.

- The silica sand will be grounded to the correct gradation by one of the two ball mills before mixing. The additives and cement will be transferred from the silos to the production equipment via enclosed pneumatic piping that will empty into 4 receiving hoppers, each equipped with a dust collector. These dust collectors will be located inside the production building and will vent inside the building. From the hoppers, the cement and additive will dropped in pre-set quantities into the mixer with the sand slurry. Any particulate emissions from the mixer will be controlled by filter socks, which will vent into the building. Wood pulp will be introduced off of hardened bales where it will be unrolled into the slurry and ground into needed size. These raw materials will be wet-mixed and formed into sheets or planks. After the boards are formed, and prior to stacking, they will be coated to prevent sticking during curing. The boards will be placed in stacks by a vacuum stacker. The emissions from the uncontrolled vacuum stacker will vent inside the building. After stacking, the boards will be heat-cured under pressure in the autoclaves located outside the production building, using steam generated by two existing boilers which are limited to fire natural gas exclusively.

Finishing Line:

A new finishing line (trim sanding/smoothing operation) will be constructed at the old pipe plant and is planned to be done in two construction phases. As indicated in the AC permit application, Phase 1 is expected to be built within 2 years of the permit issuance and Phase 2 is expected to be completed within 4 years of the permit issuance. The trim sanding/smoothing operation can be bypassed for the normal sheet/panel products.

- Phase One: Construction of up to four Trim Edge Sanders/Smoothing (new EU 035) on Sheet Machine No. 4 Finishing Line. All sanding operations will have pickup points and will be vented to a 75,000 ACFM baghouse equipped with a bag leak detector.

- Phase Two: construction of one Trim Surface Sander/Smoothing (new EU 036) on Sheet Machine No. 4 Finishing Line. All sanding operations will have pickup points and will be vented to a 25,000 ACFM baghouse equipped with a bag leak detector.

Coating Operation:

In the priming process, the panels will first travel along a conveyor through a Moisture Dryer (steam heated) to a sealer coater to a 6 MMBtu/hr natural gas sealer dryer. They will enter the painting chamber where paint will flow across the panels. The excess paint will be collected in a reservoir. Any debris collected will be separated from the paint and the paint will be re-circulated to the applicator for reapplication. The panels/planks and trim will be dried in a 12 MMBtu/hr natural gas dryer and travel through an ink jet printer prior to stacking. There will be no increase in potential VOC emissions due to this project since there are no VOCs in either the sealer or primers to be used in the coating operation.

Modification of current emission units (EUs)

- The existing dust collectors for Silo #1 (EU 002), Additive Silo #1 (EU 003), Sand Silo #2 (EU 022), Cement Silo #2 (EU 024) and Additive Silo #2 (EU 026) will be either refurbished or replaced with either the same model or a dust collector of similar design with the same air flow and gr/dscf.

- The existing natural gas fired 25.1 MMBtu/hr Boiler #1 (EU 004), 33.5 MMBtu/hr Boiler #4 (EU 028) and 33.5 MMBtu/hr Boiler #5 (EU 029) will either be refurbished or replaced with either the same model or a boiler of similar design with the same heat input rate.

The facility-wide PTE for PM emissions from all the regulated EUs will increase to 84.9 TPY, of which 81.7 TPY is associated with this AC construction/modification. This facility is subject to 40 CFR 60 Subpart OOO for Standards of Performance for Nonmetallic Mineral Processing Plants and also subject to 40 CFR 60 Subpart UUU for the Calciners and Dryers in the Mineral Processing Plant. In addition, the facility is subject to PM-RACT (Rule 62-296.712, F.A.C.), and therefore, "Operation and Maintenance" plans are required for the baghouses. A 5% opacity standard applies to all of the material handling units pursuant to Rule 62-296.712, F.A.C., and Chapter 1-3.52(2) Rules of the EPC. All the existing (5) boilers at the facility including the (3) boilers associated with this AC project, are subject to 40 CFR 60, Subpart Dc.

Also, the following activities are being exempted from permitting, pursuant to Rule 62-210.300(3)(b), F.A.C.; the Perlite Day Bin, a preheater/oven for Sheet Machine No. 4 and five (5) stacking/sweeping activities with baghouses that vent inside of the building.

Location: 809 South Woodrow Wilson Road, Plant City

UTM: 17-387.13 E and 3089.63 N NEDS NO: 0460

Emission Unit Nos.:		002	Sand Silo #1
		003	Additive Silo #1
		004	Boiler #1
		022	Sand Silo #2
		024	Cement Silo #2
		025	Sand Silo #3
		026	Additive Silo #2
		028	Boiler #4
		029	Boiler #5
	(new)	032	Perlite Ore Silo
	(new)	033	Perlite Furnace #1
	(new)	034	Perlite Furnace #2
	(new)	035	Finishing (Trim Edge Smoothing)
	(new)	036	Finishing (Trim Surface Smoothing)
	(new)	037	Sand Silo #4 for Ball Mill #4 (Sheet Machine #4)

References Permit No.: 0570460-027-AF, 0570460-028/030-AC

SPECIFIC CONDITIONS:

Facility-Wide Conditions:

1. A part of this permit is the attached General Conditions. [Rule 62-4.160, F.A.C.]

2. All applicable rules of the Environmental Protection Commission of Hillsborough County including design discharge limitations specified in the application shall be adhered to. The permit holder may also need to comply with county, municipal, federal, or other state regulations prior to construction.
[Rule 62-4.070(7), F.A.C.]

3. Issuance of this permit does not relieve the permittee from complying with applicable emission limiting standards or other requirements of Chapters 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C., or any other requirements under federal, state, or local law. [Rule 62-210.300, F.A.C.]

4. In order to establish the facility as a synthetic minor for both criteria and Hazardous Air Pollutants (HAP), the following emissions limitations shall apply:
[Rules 62-296.320, 62-212.300, 62-4.070(3), F.A.C., Permit Nos. 0570460-027/028-AF/AC, and Construction Permit Application received December 20, 2013]

A) The facility-wide PM emissions from the regulated EUs shall not exceed 84.9 tons for any 12 consecutive month period.
B) The maximum VOC emissions from the entire facility shall not exceed 49.8 tons for any 12 consecutive month period.
C) 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.

5. 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, F.A.C.]

6. 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. [Rule 62-4.070(3), F.A.C.]

7. The permittee shall not cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). More stringent opacity limits may be required on individual emission units. [Rule 62-296.320(4)(b)1 and 4, F.A.C.]

8. 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,

SPECIFIC CONDITIONS:

storing and handling. Reasonable precautions include the following: [Rule 62-296.320(4)(c), F.A.C.]

A) Paving and maintenance of roads, parking areas and yards.
B). Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, pipe flattening and land clearing.
C) Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
D) Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne.
E) Landscaping or planting of vegetation.
F) Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
G) Enclosure or covering of conveyor systems.

9. All volatile organic compound emissions from solvent washings shall be considered in the emission limitation of Specific Condition (SC) No. 4, unless the solvent is directed into containers that prevent evaporation into the atmosphere. [Rule 62-4.070(3), F.A.C.]

10. 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, 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.

11. Unless explicitly stated elsewhere in this permit, the permittee shall notify the Air Compliance Section of the Environmental Protection Commission of Hillsborough County at least 15 days prior to the date on which each formal compliance test is to begin of the date, time, and place of each such test, and the contact person who will be responsible for coordinating and having such test conducted.
[Rule 62-297.310(7)(a)9., F.A.C]

12. Circumvention. No owner or operator of an emissions unit subject to the requirements of Rules 62-296.401 through 62-296.414, F.A.C., or Rules 62-296.701 through 62-296.712, F.A.C., establishing maximum concentrations of emissions of particulate matter in the exhaust gas from the emissions unit shall circumvent the provisions of an applicable emission limitation by increasing the volume of gas in any exhaust or group of exhausts for the purpose of reducing the stack gas concentration. This includes allowing dilution air to enter the system through leaks, open vents, or similar means.
[Rule 62-296.700(5), F.A.C.]

SPECIFIC CONDITIONS:

13. 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 referenced in Specific Condition B.3, B.4, B5 and B.6, or 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 may require the owner or operator of the source to conduct compliance tests which identify the nature and quantity of pollutant emissions from the source and to provide a report on the results of said tests to the EPC. [Rule 62-297.310(7)(b), F.A.C.]

14. Submit to the Environmental Protection Commission of Hillsborough County each calendar year on or before March 1, completed DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility", for the preceding calendar year. [Rule 62-210.370(3), F.A.C.]

15. The permittee shall provide timely notification to the Environmental Protection Commission of Hillsborough County prior to implementing any changes that may result in a modification to this permit pursuant to Rule 62-210.200(203), F.A.C., Modification. The changes do not include normal maintenance, but may include, and are not limited to, the following, and may also require prior authorization before implementation: [Rules 62-210.300 and 62-4.070(3), F.A.C.]

A) Alteration or replacement of any equipment or major component of such equipment.
B) Installation or addition of any equipment which is a source of air pollution.
C) The use of materials and fuels other than those authorized by this permit.

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. In order to provide reasonable assurance that the pollution control equipment are operated and maintained adequately, the permittee shall submit an updated Operation and Maintenance (O&M) Plan to include the new and modified (replaced/refurbished) baghouses with the FESOP revision application for incorporating the AC permit into an operating permit. [Rules 62-296.700 and 62-4.070(3), F.A.C.]

18. A FESOP revision application to incorporate this AC permit conditions shall be submitted to the EPC no later than 60 days after completion of:

A. All the initial tests for the Phase I emission units (EUs 024-026, 028-029, 032-035 and 037); and
B. All the initial tests for the Phase II emission units (EUs 002-004, 022 and 036);

but no later than 120 days prior to the expiration date of this permit, whichever occurs first.

[Rules 62-4.070(3), 62-4.090, 62-210.300(2), and 62-210.900, F.A.C.]

SPECIFIC CONDITIONS:

Subsection A. Existing Sheet Plant – This section addresses the following emission units:

EU ID No.	Description
002	Sand Silo #1
003	Additive Silo #1
004	Boiler #1
022	Sand Silo #2

All handling operations of silica sand prior to the ball mills, except for the initial truck unloading of sand, are subject to 40 CFR 60 Subpart OOO. Sand Silo #1 is also subject to PM-RACT. The rest of the baghouse units are exempted from PM-RACT with the allowance of a grain loading of 0.02 gr/dscf; however, this allowance was granted only with the requirement that an O&M Plan also be included for all baghouses exempted from PM-RACT. Boiler No. 1 is subject to 40 CFR 60 Subpart Dc.

This permit only addresses the PM emissions emitted from the above mention emission units, and establishes limitations and requirements under this Subsection. VOC emission limitations and requirements are addressed in Permit No. 0570460-027-AF.

A.1 Pursuant to the BACT determination of June 6, 1996, and December 19, 1996, Boiler #1 shall be fired exclusively on natural gas. [Rule 62-296.406, F.A.C.]

A.2 [Reserved.]
A.3 [Reserved.]

A.4 In order to ensure compliance with Specific Condition Nos. A.1, A.5, A.6, A.7 and A.8, the following restrictions shall apply:
[Rule 62-4.070(3), F.A.C., and Permit No. 0570460-027-AF and Construction Permit Application received December 20, 2013]

A) The hours of operation of Boilers #1 shall not be limited, but the maximum heat content shall not exceed 25.1 MMBtu/hr/boiler. The maximum natural gas usage rate is 220 MMft3/yr/boiler.
B) No spent solvents or waste oils shall be charged into the boiler(s).
C) All dust laden air generated during silo loading, and bucket elevator operation for the sand silos, shall be vented to the baghouse controlling that particular emissions unit.
D) Pneumatic loading of the additive silos shall not exceed 14 psig.
E) No silica sand shall be delivered without the proper hopper enclosures in place and the bucket elevator shall be covered.

A.5 As requested by the permittee, and in order to exempt these emission units from Particulate RACT, the maximum allowable particulate emissions and potential to emit from each emission unit, EU 003 (Additive Silo #1) and EU 022 (Sand Silo #2) shall not exceed 0.02 gr/dscf and one (1) ton per year, respectively.

SPECIFIC CONDITIONS:

[Rule 62-4.070(3), F.A.C and Permit No. 0570460-027-AF and Construction Permit Application received December 20, 2013]

A.6 As requested by the permittee, the maximum allowable particulate emissions and potential to emit from EU 002 (Sand Silo #1) shall not exceed 0.02 gr/dscf and 2.4 tons per 12 consecutive months, based on the design flow rate of 3,240 acfm and 8,760 hours of operation per year.

[Rule 62-4.070(3), F.A.C and Permit No. 0570460-027-AF and Construction Permit Application received December 20, 2013]

A.7 Visible emissions from Boilers #1 shall not exceed a density of 20% opacity, except that a density of 40% opacity is allowed for not more than two minutes of any one hour.
[Rule 62-296.406(1), F.A.C. and Permit No. 0570460-027-AF and Construction Permit Application received December 20, 2013]

A.8 Unless otherwise specified, visible emissions for all emission units and emission sources in this subsection shall not exceed 5% opacity.

[Rule 62-4.070(3), F.A.C., Permit No. 0570460-027-AF and Chapter 1-3.52(2), Rules of the EPC and Construction Permit Application received December 20, 2013]

A.9 The permittee shall operate and maintain a measuring device to determine the air pressure differential across the baghouse(s) within 10 percent accuracy. [Rule 62-4.070(3), F.A.C and Permit No. 0570460-027-AF]

A.10 [Reserved.]

A.11 Compliance with the emissions limitations of Facility-wide Specific Condition No. 4 shall be determined using Material Safety Data Sheets (MSDS) or manufacturer's technical datasheet, provided that the datasheet is supported by Method 24 analysis of the product. The most current version of the MSDS for the paint, ink, ink conditioner, MEK, and anti-stick coating shall be kept on site and shall be made available upon request to the Environmental Protection Commission of Hillsborough County.
[Rule 62-4.070(3), F.A.C and Permit No. 0570460-027-AF and Construction Permit Application received December 20, 2013]

A.12 Test EUs 002, 003, 004 and 022 for visible emissions at the point of highest opacity within 30 days of start-up after completion of the refurbishment or replacement of the existing dust collectors and existing boiler, and annually thereafter. Submit a copy of the test data to the Air Compliance Section of the Air Management Division of the Environmental protection Commission of Hillsborough County within 45 days of such testing. Testing procedures shall be consistent with the requirements of 40 CFR 60 and Rule 62-297, F.A.C. [Rule 62-297.310(7)(a), F.A.C. and Chapter 1-3.52(3), Rules of the EPC]

SPECIFIC CONDITIONS:

A.13 Compliance with the emission limitations of Specific Condition No. A.5, A.6, A.7 and A.8 shall be determined using EPA Methods 1, 2, 4, 5 and 9 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 62-297, F.A.C. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Rule 62-297, F.A.C. and 40 CFR 60, Appendix A. All visible emission test observation periods shall be a minimum of 30 minutes unless otherwise noted in this permit. Visible emission tests of the boilers shall be a minimum of 60 minutes in duration.
[Rule 62-297.310(4)(a), F.A.C. and 40 CFR 60]

A.14 Compliance testing of Boiler No. 1 must be accomplished during a period when it is cycling up to a normal high firing rate, or is continuously operated at capacity. Continuous capacity is defined as 90-100% of rated capacity of 25.1 MMBtu/hr. Capacity can also be represented as a minimum of 60 minutes of observations beginning at the start of an autoclave cycle and including at least one cycle of the boiler from idle up to the maximum fire rate. If it is impracticable to test at capacity, then the boiler may be tested at less than capacity; in this case subsequent operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the EPC. The permittee shall submit a statement of the operating mode as part of the compliance test. Failure to submit an operation mode statement or operating at conditions which do not reflect the normal operating conditions may invalidate the data.
[Section 403.161(1)(c) Florida Statutes and Rule 62-4.070(3), F.A.C.]

A.15 Compliance testing of the baghouses shall be conducted with the EUs operating at no less than their normal operating level. Due to the nature of some of the loading operating on a batch cycle and the difficulty in equating this to an hourly rate, the following specifications for visible emission testing shall be followed: [Rule 62-4.070(3), F.A.C.]

A. <u>EU 002 (Sand Silo #1) and EU 022 (Sand Silo #2)</u>

Loading of the silo occurs by the dumping of moist sand into a hopper and the transfer of sand to the top of the silos by a bucket elevator. A typical batch load is approximately 25.5 tons. The test should be performed while sand is consistently being processed by the bucket elevator and actively being loaded into the specified silo. If the batch is exhausted prior to achieving the minimum testing time, the test should be suspended until another batch load can be observed and added to the test. These silos are subject to 40 CFR 60 Subpart OOO and require a 30 minute minimum observation time. All operating conditions (weight processed, time, etc.) must be submitted with the test or it may be invalidated.
[40 CFR 60.675(c)(2) and Rule 62-297.310(4)(a), F.A.C.]

B. <u>EU 003 (Additive Silo #1)</u>

Visible emission tests shall be conducted while loading the silo at a rate that, at a minimum, is representative of the normal silo loading rate. To ensure typical loading operation, the loading of both silos during visible emission testing shall occur between a minimum of 11 psig and a maximum of 14 psig

delivered from the loading trucks. The test report must specify the actual loading rate along with the loading pressure.

A.16 If the parameters from Condition A.15 cannot be met, then the source will be limited to 110% of the limiting conditions under which it complied until a new test is conducted. Once the unit is so limited, then operation at higher rates is allowed for no more than fifteen days for purposes of additional compliance testing to regain the normal operational levels, with prior notification to the EPC. Failure to submit the input rates and actual operating conditions may invalidate the test.
[Rules 62-4.070(3) and 62-297.310(2)(b), F.A.C.]

A.17 [Reserved.]

<u>Subpart OOO Applicability</u>

{Permitting Note: The handling of silica sand at this facility was determined to be subject to 40 CFR 60 Subpart OOO for Standards of Performance for Nonmetallic Mineral Processing Plants. The two sand silos and associated handling equipment prior to the ball mills are all affected sources.

The following list itemizes the affected sources:

- Underground conveyor from truck sand-unloading hopper to bucket elevator.
- Bucket elevator.
- Sand Silo #1 (EU 002)
- Chute and conveyor from bucket elevator to Sand Silo #2
- Sand Silo #2 (EU 022)
- Conveyor from Sand Silo #1 to Ball Mill #1
- Conveyor from Sand Silo #1 to Ball Mill #2
- Conveyor from Sand Silo #2 that drops material onto conveyor from Sand Silo #1 to Ball Mill #2

The underground conveyor was determined to be exempt from testing. The three conveyors leading from the sand silos to the ball mills are being grouped for a single visible emission test using Method 22 because of their obscured location behind the silos and their operation continuing inside the building. These affected testing points will be considered additional emission points related to Sand Silo #1.}

A.18 The following emission points shall be tested annually for visible emissions to demonstrate compliance with the stated opacity limit. The required method of testing and the minimum observation time are also specified. Sand Silos #1 and #2 (EU 002 and EU 022) have already adopted additional testing requirements from Subpart OOO as referenced in Specific Condition A.15. At least 15 days advanced notice of testing is required on any source subject to Subpart OOO, including Sand Silos #1 and #2 (EU 002 and EU 022). A copy of the test data shall be submitted to the Air Compliance Section of the Air Management Division of the Environmental protection Commission of Hillsborough County within 45 days of such testing. Testing procedures shall be consistent with the requirements of 40 CFR 60 and Rule 62-

SPECIFIC CONDITIONS:

297, F.A.C. [40 CFR 60.675(c)(3), 60.675(d), 60.8(a) and 60.8(d), Rules 62-297.310(7)(a)(4) and 62-296.320(4) F.A.C., Chapters 1-3.52(2) and 1-3.52(3), Rules of the EPC]

Source	Opacity Limit	Test Method	Minimum Observation Time
Bucket Elevator	5%	9	30 minutes
Conveyor from Bucket Elevator to Silo #2	5%	9	30 minutes
Combined Conveyors from Silos to Ball Mills	3 min/hr*	22	60 minutes

* - Since no defined min/hr limit was stated in Subpart OOO, 3 min/hr was derived as the standard based on the 5% opacity limit (5% x 60 min/hr).

A.19 In determining compliance with the opacity standards from Specific Condition A.18 requiring Method 9, the owner or operator shall use EPA Method 9 and the procedures in 40 CFR § 60.11, with the following additions: [40 CFR 60.675(c)]

(i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
(ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.

A.20 Compliance testing of the emission points identified in Condition A.18 shall be conducted while the observed source is processing sand at a minimum of the normal transfer rate for the duration of the test, as much as practical. If the transfer of sand is terminated prior to achieving the minimum testing time, the test should be suspended until additional loading can be observed and added to the test. The following specifications for visible emission testing should be followed: [Rule 62-4.070(3)]

A. <u>Bucket Elevator and Conveyor from Bucket Elevator to Silo #2</u>

These tests should be performed while sand is consistently being processed by the bucket elevator or actively being loaded through the specified conveyor, depending on which source is being tested. Observation of emissions should be from the point of highest opacity across the entire length of the source. All operating conditions (weight processed, time, etc.) must be submitted with the test or it may be invalidated.

B. <u>Combined Conveyors from Silo's to Ball Mills</u>

EPA Method 22 test shall occur while sand is consistently being processed to both ball mills from both

silos, as much as practical. The ball mills should be fully operating during the test. The focus of observation during the test should be an overview of the cluster of conveyors leading into the ball mill enclosure. Each side of the ball mill enclosure and the roof should be observed for at least 15 minutes as part of the test. The test report shall include details about the transfer of material, which conveyors were being utilized and process rate, where available. Failure to provide documentation of test conditions could invalidate the test. [40 CFR 60.675(d)]

A.21 If the parameters from Specific Condition A.20 cannot be met, then the source will be limited to 110% of the limiting conditions under which it complied (i.e. material transfer rate) until a new test is conducted. Once the unit is so limited, then operation at higher rates is allowed for no more than fifteen days for purposes of additional compliance testing to regain the normal operational levels, with prior notification to the EPC. Failure to submit the input rates and actual operating conditions may invalidate the test. [Rules 62-4.070(3) and 62-297.310(2)(b), F.A.C.]

NSPS Requirements

A.22 The permittee shall comply with the following requirements: [Rule 62-204.800, F.A.C.]

A) Pursuant to 40 CFR 60.48c NSPS Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), the permittee is required to maintain daily records of the hours of operation and amount of natural gas combusted in the boilers. If the most recent visible emissions test was conducted within 90 - 100% of the maximum allowable natural gas usage rate and since none of the emission limits in Subpart Dc are applicable to the boiler when firing natural gas, it has been determined by the Department that keeping records for natural gas usage and hours of operation on a monthly rather than daily basis is adequate for the purpose of verifying the periods that only natural gas is burned in this boiler. These records shall be recorded in a permanent form suitable for inspection upon request and shall be retained for at least a 2 year period from the date of such recording. [Rule 62-204.800, F.A.C., and 40 CFR 60.48c(g) and (i) (Subpart Dc)]

B) The permittee shall furnish the EPC written notification as follows: [40 CFR 60.7(a)]
    1) 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)]

C) 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)]

SPECIFIC CONDITIONS:

D) 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. [40 CFR 60.7(f)]
E) Compliance with opacity standards in this part shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A (40 CFR 60). [40 CFR 60.11(b)]
F) 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)]
G) 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)]
H) 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]

Miscellaneous Requirements

A.23 All of the silos and affected baghouses at the facility are required to meet the requirements of the Operation and Maintenance Plans (O&M Plan) identified in Appendix A and B. The baghouse subject to PM RACT (EU 002) shall use Appendix A – Large Baghouse O&M Plan. The remaining baghouses identified as emission units in this subsection shall use Appendix B – Small Baghouse O&M Plan. The identification of each emission unit subject to PM RACT is included with Appendix A. All inspections on the units subject to RACT (EU 002), including daily inspections along with permanent recording of the pressure drops, must be recorded and maintained as evidence of compliance with the O&M Plan of Appendix A. Sources subject to Appendix B shall maintain records of inspections and maintenance as indicated in the O&M Plan. [Rules 62-4.070(3) and 62-296.700(6)(a) and (b), F.A.C.]

{Permitting note: the facility shall submit an updated O&M Plan with the operation permit application, which includes each new and modified EU accordingly.}

A.24 [Reserved.]

A.25 Once the six day bins have been modified as described in the process description and connected to the stacker baghouses for secondary emission control, all reasonable precautions shall be taken to prevent

SPECIFIC CONDITIONS:

unconfined emissions from their operation. Reasonable precautions include the following:
[Rule 62-4.070(3), F.A.C.]

A) Frequently inspect operation of day bins, with attached bin vents, and stacker baghouses to ensure proper operation. Ensure that no visible emissions are present from baghouse exhausts or day bin building enclosure.
B) Immediately repair any malfunction of the control system (bin vents and stacker baghouses) to minimize excess emissions.
C) Ensure that the bin vents are being properly cleaned to maintain designed control efficiency.
D) Records of any malfunctions and corrective action shall be maintained.

Recordkeeping Requirements

A.26 In order to demonstrate compliance with Specific Condition Nos. A.4, A.5, A.6 and Facility-Wide Condition No. 4, the permittee shall maintain monthly records of operations for the most recent three year period. The records shall be made available to the Environmental Protection Commission of Hillsborough County, state or federal air pollution agency upon request. The records shall include, but not limited to, the following: [Rule 62-4.160(14)(b), F.A.C.]

A) Date, Month, Year
B) Tons of each dry material received for each silo and combined total including any silica transferred from the pipe plant
C) Amount of natural gas combusted in each boiler
D) Hours of operation of the boiler
K) Rolling 12 month total of B), C) and D) above

SPECIFIC CONDITIONS:

Subsection B. New Perlite Plant – This section addresses the following emission units:

EU ID No.	Description
024	Cement Silo #2
025	Sand Silo #3
026	Additive Silo #2
028	Boiler #4
029	Boiler #5
032	Perlite Ore Storage Silo
033	Perlite Furnace #1
034	Perlite Furnace #2
035	Finishing (Trim Edge Smoothing)
036	Finishing (Trim Surface Smoothing)
037	Sand Silo #4 (Ball Mill #4)

All handling operations of silica sand prior to the ball mills (EUs 025 and 037) is subject to 40 CFR 60 Subpart OOO. The Finishing and Furnace baghouses (EUs 033, 034, 035 and 036) are subject to PM RACT. The baghouses under EUs 024, 025 026 and 032 are exempted from PM RACT with the allowance of a grain loading of 0.02 gr/dscf, except 0.03 gr/dscf for EU 032; however, this allowance was granted only with the requirement that an O&M Plan also be included for all baghouses exempted from RACT. The two boilers are subject to 40 CFR 60 Subpart Dc. The (2) furnace line (EUs 033 and 034) are subject to 40 CFR 60 Subpart UUU.

This permit only addresses the PM emissions emitted from the above mention emission units, and establishes limitations and requirements under this Subsection. VOC emission limitations and requirements are addressed in Permit No. 0570460-027-AF.

B.1 As requested by the permittee, and in order to exempt these emission units from PM RACT, the maximum allowable particulate emissions and potential to emit from each emission unit are as follows:

A) EU 032 (Perlite Ore Storage Silo) shall not exceed 0.03 gr/dscf.
B) EU 024 (Cement Silo #2), EU 025 (Sand Silo #3), and EU 026 (Additive Silo #2) shall not exceed 0.02 gr/dscf.
C) Each EU shall not exceed 1 (one) ton per year.

[Rule 62-4.070(3), F.A.C., Permit No. 0570460-027-AF and Construction Permit Application received December 20, 2013]

B.2 As requested by the permittee, the maximum allowable particulate emissions and potential to emit from each emission unit are as follows:

A) EU 033 (Perlite Furnace #1) shall not exceed 0.02 gr/dscf and 7.5 TPY.

SPECIFIC CONDITIONS:

B) EU 034 (Perlite Furnace #2) shall not exceed 0.02 gr/dscf and 7.5 TPY.
C) EU 035 (Trim Edge Smoothing) shall not exceed 0.015 gr/dscf and 42.2 TPY.
D) EU 036 (Trim Surface Smoothing) shall not exceed 0.015 gr/dscf and 14.1TPY.

[40 CFR 60, Subpart UUU (60.732), Rules 62-4.070(3) and 62-210.200(PTE), F.A.C., and Construction Permit Application received December 20, 2013]

B.3 Unless otherwise specified, visible emissions for all the emission units and emission sources in this subsection shall not exceed 5% opacity.

[40 CFR 60, Subpart OOO and Subpart UUU, Rules 62-296.320(4), 62-296.711(2)(a) F.A.C., Chapter 1-3.52(2), Rules of the EPC, Permit No. 0570460-027-AF and Construction Permit Application received December 20, 2013]

B.4 Boilers #4 and #5 shall be fired exclusively on natural gas. [Rule 62-296.406, F.A.C. and BACT Determination of November 8, 2000, Permit No. 0570460-027-AF and Construction Permit Application received December 20, 2013]

B.5 Visible emissions from Boilers #4 and #5 shall not exceed a density of 20% opacity, except that a density of 40% opacity is allowed for not more than two minutes of any one hour.

[Rule 62-296.406(1), F.A.C., Permit No. 0570460-027-AF and Construction Permit Application received December 20, 2013]

B.6 In order to ensure compliance with Specific Conditions Nos. B.1 thru B.5, the following restrictions shall apply: [Rule 62-4.070(3), F.A.C. and Permit No. 0570460-027-AF]

A) The hours of operation of Boilers #4 and #5 shall not be limited, but the maximum heat content shall not exceed 33.5 MMBtu/hr/boiler. The maximum natural gas usage rate is 293.5 MMft3/yr/boiler.
B) Boilers #4 and #5 are authorized to fire natural gas exclusively. No spent solvents or waste oils shall be charged into the boiler(s).
C) All dust laden air generated during silo loading, and bucket elevator operation for the sand silo, shall be vented to the baghouse controlling that particular emissions unit.
D) Pneumatic loading of the cement and the additive silos shall not exceed 14 psig.
E) No silica sand shall be delivered without the proper hopper enclosures in place and the bucket elevator and conveyor belt from the sand silo shall be covered by a shroud or a roof.

B.7 In order to demonstrate compliance with Specific Condition Nos. B.2. and B.3, test EUs 033, 034, 035 and 036 for particulate matter (PM) and visible emissions (VE) within 60 days after achieving the maximum production rate, but not later than 180 days after initial startup of the finishing lines (Phases 1 and 2). Testing of EUs 033 and 034 shall follow the requirements under Specific Condition No. B.24. Submit a copy of the test data to the Air Compliance Section of the Air Management Division of the

SPECIFIC CONDITIONS:

Environmental protection Commission of Hillsborough County within 45 days of such testing. Testing procedures shall be consistent with the requirements of 40 CFR 60 and Rule 62-297, F.A.C. In addition, [40 CFR 60, Subpart UUU (60.8 and 60.732), Rule 62-4.070(3) and Rule 62-297.310(7)(a), F.A.C., Construction Permit Application received December 20, 2013 and Chapter 1-3.52(3), Rules of the EPC]

B.8 In order to demonstrate compliance with Specific Condition Nos. B.3. and B.5., test EUs 024 thru 026, EUs 028 and 029, EU 032 and EU 037 at the point of highest opacity within 30 days of start-up after completion of the refurbishment or replacement of the existing dust collectors and existing boiler, or construction, and annually thereafter. Submit a copy of the test data to the Air Compliance Section of the Air Management Division of the Environmental protection Commission of Hillsborough County within 45 days of such testing. Testing procedures shall be consistent with the requirements of 40 CFR 60 and Rule 62-297, F.A.C. [Rule 62-297.310(7)(a), F.A.C and Chapter 1-3.52(3), Rules of the EPC]

B.9 Compliance with the emission limitations of Specific Condition Nos. B.1, B.2, B.3 and B.5 shall be determined using EPA Methods 1, 2, 4, 5 and 9 contained in 40 CFR 60, Appendix A and adopted by reference in Rule 62-297, F.A.C. The minimum requirements for stack sampling facilities, source sampling and reporting, shall be in accordance with Rule 62-297, F.A.C. and 40 CFR 60, Appendix A. All visible emission test observation periods shall be a minimum of 30 minutes unless otherwise noted in this permit. Visible emission tests of the boilers shall be a minimum of 60 minutes in duration. PM test shall be determined using EPA Reference Methods 1, 2, 4, and 5. The sampling time and sample volume for each run shall be at least 60 minutes. [Rule 62-297.310(4)(a), F.A.C.]

B.10 Compliance testing of the boilers must be accomplished during a period when it is cycling up to a normal high firing rate, or is continuously operated at capacity. Continuous capacity is defined as 90-100% of rated capacity of; 33.5 MMBtu/hr for the EUs 028 and 029; 75,000 acfm for EU 035; and 25,000 acfm for EU 036. Capacity can also be represented as a minimum of 60 minutes of observations beginning at the start of an autoclave cycle and including at least one cycle of the boiler from idle up to the maximum fire rate. If it is impracticable to test at capacity, then the boiler may be tested at less than capacity; in this case subsequent operation is limited to 110% of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the EPC. The permittee shall submit a statement of the operating mode as part of the compliance test. Failure to submit an operation mode statement or operating at conditions which do not reflect the normal operating conditions may invalidate the data. [Section 403.161(1)(c) Florida Statutes and Rule 62-4.070(3), F.A.C.]

B.11 Compliance testing of the baghouses shall be conducted with the EUs operating at no less than their normal operating level. Due to the nature of some of the loading operating on a batch cycle and the difficulty in equating this to an hourly rate, the following specifications for visible emission testing shall be followed: [Rule 62-4.070(3), F.A.C.]

SPECIFIC CONDITIONS:

A. EU 025 (Sand Silo #3)

Loading of the silo occurs by the dumping of moist sand into a hopper and the transfer of sand to the top of the silo by a bucket elevator. A typical batch load is approximately 25.5 tons. The test should be performed while sand is consistently being processed by the bucket elevator and actively being loaded into the specified silo. If the batch is exhausted prior to achieving the minimum testing time, the test should be suspended until another batch load can be observed and added to the test. This silo is subject to 40 CFR 60 Subpart OOO and requires a 30 minute minimum observation time. All operating conditions (weight processed, time, etc.) must be submitted with the test or it may be invalidated.
[40 CFR 60.675(c)(2) and Rule 62-297.310(4)(a), F.A.C.]

B. EU 024 (Cement Silo #2) and EU 026 (Additive Silo #2)

Visible emission tests shall be conducted while loading the silo at a rate that, at a minimum, is representative of the normal silo loading rate. To ensure typical loading operation, the loading of both silos during visible emission testing shall occur between a minimum of 11 psig and a maximum of 14 psig delivered from the loading trucks. The test report must specify the actual loading rate along with the loading pressure.

C. EU 035 (Trim Edge Smoothing) and EU 036 (Trim Surface Smoothing)

Visible emission tests shall be conducted during the operation of all the operational Trim Edge Sanders/Smoothing on Sheet Machine No. 4 Finishing Line (EUs 035 and 036), which are vented to either the 75,000 ACFM baghouse or the 25,000 ACFM baghouse (Phase 2), both equipped with a bag leak detector.

B.12 If the parameters from Condition B.11 cannot be met, then the source will be limited to 110% of the limiting conditions under which it complied until a new test is conducted. Once the unit is so limited, then operation at higher rates is allowed for no more than fifteen days for purposes of additional compliance testing to regain the normal operational levels, with prior notification to the EPC. Failure to submit the input rates and actual operating conditions may invalidate the test.
[Rules 62-4.070(3) and 62-297.310(2)(b), F.A.C.]

B.13 [Reserved.]

Subpart OOO Applicability

{Permitting Note: The handling of silica sand at this facility was determined to be subject to 40 CFR 60 Subpart OOO for Standards of Performance for Nonmetallic Mineral Processing Plants. The sand silo and associated handling equipment prior to the ball mill are all affected sources.

The following list itemizes the affected sources:

SPECIFIC CONDITIONS:

- Underground conveyor from truck sand-unloading hopper to bucket elevator
- Bucket elevator and chute to conveyor
- Conveyor from bucket elevator to Sand Silos #3 and #4
- Sand Silo #3 (EU 025) and #4 (EU 037)
- Conveyor from Sand Silo #3 to Ball Mill #3 and Sand Silo #4 to Ball Mill #4

The underground conveyor was determined to be exempt from testing. The conveyors leading from the sand silos to the ball mills are being grouped for a single visible emission test using Method 22 since their obscured location may be behind the silos and their operation continuing inside the building. These affected testing points will be considered additional emission points related to Sand Silos #3 and #4}

B.14 The following emission points shall be tested following initial operation, and annually thereafter, for visible emissions to show compliance with the stated opacity limit. The required method of testing and the minimum observation time are also specified. Sand Silo #3 and #4 have adopted additional testing requirements from Subpart OOO as referenced in Specific Condition B.11. At least 15 days advanced notice of testing is required on any source subject to Subpart OOO, including Sand Silo #3 and #4. A copy of the test data shall be submitted to the Air Compliance Section of the Air Management Division of the Environmental protection Commission of Hillsborough County within 45 days of such testing. Testing procedures shall be consistent with the requirements of 40 CFR 60 and Rule 62-297, F.A.C.
[40 CFR 60.8(a) and 60.8(d), Rules 62-297.310(7)(a)(4) and 62-296.320(4) F.A.C., Chapters 1-3.52(2) and 1-3.52(3), Rules of the EPC and Construction Permit Application received December 20, 2013]

Source	Opacity Limit	Test Method	Minimum Observation Time
Bucket Elevator	5%	9	30 minutes
Conveyor from Bucket Elevator to Silos	5%	9	30 minutes
Conveyor from Silo to Ball Mill*	5%	9	30 minutes
		or	
	3 min/hr**	22	60 minutes

* - Due to potential difficulties in meeting the observation point requirements for a Method 9 test, Method 22 has been added as an alternative testing method for this point.

** - Since no defined min/hr limit was stated in Subpart OOO, 3 min/hr was derived as the standard based on the 5% opacity limit (5% x 60 min/hr).

SPECIFIC CONDITIONS:

B.15 In determining compliance with the opacity standards from Condition B.14, the owner or operator shall use Method 9, where required, and the procedures in 40 CFR § 60.11, with the following additions: [40 CFR 60.675(c)]

(i) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).
(ii) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.

B.16 Compliance testing of the emission points identified in Condition B.14 shall be conducted while the observed source is processing sand at a minimum of the normal transfer rate for the duration of the test, as much as practical. If the transfer of sand is terminated prior to achieving the minimum testing time, the test should be suspended until additional loading can be observed and added to the test. The following specifications for visible emission testing should be followed: [Rule 62-4.070(3), F.A.C.]

A. <u>Bucket Elevator and Conveyor from Bucket Elevator to Silos #3 or #4</u>

These tests should be performed while sand is consistently being processed by the bucket elevator or actively being loaded through the specified conveyor, depending on which source is being tested. Observation of emissions should be from the point of highest opacity across the entire length of the source. All operating conditions (weight processed, time, etc.) must be submitted with the test or it may be invalidated.

B. <u>Conveyor from Silo #3 to Ball Mill #3 or from Silo #4 to Ball Mill #4</u>

This test should be performed while sand is consistently being loaded through the conveyor leading to the ball mill. The ball mill shall remain in continual operation during the testing period. Observation of emissions should be from the point of highest opacity across the entire length of the source, including the discharge of material into the ball mill. All operating conditions (weight processed, time, etc.) must be submitted with the test or it may be invalidated.

B.17 If the parameters from Specific Condition B.16 cannot be met, then the source will be limited to 110% of the limiting conditions under which it complied (i.e. material transfer rate) until a new test is conducted. Once the unit is so limited, then operation at higher rates is allowed for no more than fifteen days for purposes of additional compliance testing to regain the normal operational levels, with prior notification to the EPC. Failure to submit the input rates and actual operating conditions may invalidate the test. [Rules 62-4.070(3) and 62-297.310(2)(b), F.A.C.]

B.18 [Reserved.]

B.19 All of the silos and affected baghouses at the facility are required to meet the requirements of the Operation and Maintenance Plans (O&M Plan) identified in Appendix A and B. The baghouses subject to

SPECIFIC CONDITIONS:

PM RACT (EUs 033, 034, 035 and 036) shall use Appendix A – Large Baghouse O&M Plan. The remaining baghouses identified as emission units in this subsection shall use Appendix B – Small Baghouse O&M Plan. The identification of each emission unit subject to PM RACT is included with Appendix A. All inspections on the units subject to RACT (EU 035 and EU 036), including daily inspections along with permanent recording of the pressure drops, must be recorded and maintained as evidence of compliance with the O&M Plan of Appendix A. Sources subject to Appendix B shall maintain records of inspections and maintenance as indicated in the O&M Plan. [Rules 62-4.070(3) and 62-296.700(6)(a) and (b), F.A.C.]

{Permitting note: the facility shall submit an updated O&M Plan with the operation permit application, which include each new and modified EU accordingly.}

B.20 [Reserved.]

B.21 The permittee shall operate and maintain a measuring device to determine the air pressure differential across the baghouse(s) within 10 percent accuracy.
[Rule 62-4.070(3), F.A.C., Permit No. 0570460-027-AF and Construction Permit Application received December 20, 2013]

Recordkeeping Requirements

B.22 In order to demonstrate compliance with Specific Condition No. B.2 and B.3, the permittee shall maintain monthly records of operations for the most recent three year period. The records shall be made available to the Environmental Protection Commission of Hillsborough County, state or federal air pollution agency upon request. The records shall include, but not limited to, the following:
[Rule 62-4.160(14)(b), F.A.C.]

A) Date, Month, Year
B) Tons of each dry material received for each silo and combined total including any silica transferred from the existing sheet plant
C) Amount of natural gas combusted in each boiler
D) Hours of operation of each boiler
E) Rolling 12 month total of B), C), and D) above

Subpart UUU Applicability

B.23 The following monitoring requirements apply to EUs 033 and 034:

A) With the exception of the process units described in B), and C) below, the owner or operator of an affected facility subject to this Subpart who uses a dry control device to comply with the mass emission standard shall install, calibrate, maintain, and operate a continuous monitoring system to measure and record the opacity of emissions discharged into the atmosphere from the control

device.

B) In lieu of a continuous opacity monitoring system, the owner or operator of a ball clay vibrating grate dryer, a bentonite rotary dryer, a diatomite flash dryer, a diatomite rotary calciner, a feldspar rotary dryer, a fire clay rotary dryer, an industrial sand fluid bed dryer, a kaolin rotary calciner, a perlite rotary dryer, a roofing granules fluid bed dryer, a roofing granules rotary dryer, a talc rotary calciner, a titanium dioxide spray dryer, a titanium dioxide fluid bed dryer, a vermiculite fluid bed dryer, or a vermiculite rotary dryer who uses a dry control device may have a certified visible emissions observer measure and record three 6-minute averages of the opacity of visible emissions to the atmosphere each day of operation in accordance with Method 9 of appendix A of part 60.

D) The owner or operator of a ball clay rotary dryer, a diatomite rotary dryer, a feldspar fluid bed dryer, a fuller's earth rotary dryer, a gypsum rotary dryer, a gypsum flash calciner, gypsum kettle calciner, an industrial sand rotary dryer, a kaolin rotary dryer, a kaolin multiple hearth furnace, a perlite expansion furnace, a talc flash dryer, a talc rotary dryer, a titanium dioxide direct or indirect rotary dryer or a vermiculite expansion furnace who uses a dry control device is exempt from the monitoring requirements of this section.

[40 CFR 60.734 and 60.736, Rules 62-4.070(3), F.A.C.]

B.24 In conducting the performance tests required in 40 CFR §60.8, the owner or operator shall use the test methods in Appendix A of this Subpart, except as provided in §60.8(b) in order to comply with the standards and limits in Specific Condition Nos. B.2 and B.3:

A) Method 5 shall be used to determine the particulate matter concentration. The sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm.

B) Method 9 and the procedures in 40 CFR §60.11 shall be used to determine opacity from stack emissions.

B.25 The following are the recordkeeping and reporting requirements:

A) Records of the measurements required in Specific Condition No. B.23 shall be retained for at least 2 years.

B) Each owner or operator shall submit written reports semiannually of exceedances of control device operating parameters required to be monitored by B.23. For the purpose of these reports, exceedances are defined as such, all 6-minute periods during which the average opacity from dry control devices is greater than 10 percent.

C) The requirements of this section remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Clean Air Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected facilities within the State will be relieved of the obligation to comply with this section provided that they comply with the requirements established by the State.

[40 CFR 60.735, Rules 62-4.070(3), F.A.C.]

SPECIFIC CONDITIONS:

NSPS Requirements

B.26 The permittee shall comply with the following requirements: [Rule 62-204.800, F.A.C.]

A) Pursuant to 40 CFR 60.48c NSPS Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units), the permittee is required to maintain daily records of the hours of operation and amount of natural gas combusted in the boilers. If the most recent visible emissions test was conducted within 90 - 100% of the maximum allowable natural gas usage rate and since none of the emission limits in Subpart Dc are applicable to the boiler when firing natural gas, it has been determined by the Department that keeping records for natural gas usage and hours of operation on a monthly rather than daily basis is adequate for the purpose of verifying the periods that only natural gas is burned in this boiler. These records shall be recorded in a permanent form suitable for inspection upon request and shall be retained for at least a 2 year period from the date of such recording. [Rule 62-204.800, F.A.C., and 40 CFR 60.48c(g) and (i) (Subpart Dc)]

B) The permittee shall furnish the EPC written notification as follows: [40 CFR 60.7(a)]

1) 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)]

C) 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)]

D) 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. [40 CFR 60.7(f)]

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

F) 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)]

G) 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)]

H) No owner or operator subject to the provisions of this part shall build, erect, install, or use any

SPECIFIC CONDITIONS:

article, machine, equipment or process, the use of which conceals an emissions 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]

ENVIRONMENTAL PROTECTION COMMISSION
OF HILLSBOROUGH COUNTY

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Richard D. Garrity, Ph.D.
Executive Director