

TECHNICAL EVALUATION  
AND  
PRELIMINARY DETERMINATION

FOR

Florida Silica Sand Company

Hillsborough County

Draft Construction Permit

Application Number

0571446-001-AC

Environmental Protection Commission of

Hillsborough County

Tampa, FL

January 27, 2015

## I. Project Description

### A. Applicant:

Aaron Herwig  
President  
Florida Silica Sand Company  
2962 Trivium Circle Suite 106  
Ft. Lauderdale, FL 33312

### B. Engineer:

Robert A Jones, P.E.  
RJones Engineering  
5039 Quadrangle Ct.  
Wesley Chapel, FL 33544

P.E. No.: 31119

### C. Project and Location:

This permit authorizes the construction of a sand drying and handling facility. The project has been assigned NEDS Source Classification Code Nos. 3-05-027-21 for Sand Drying Gas-fired Rotary Dryer. The Standard Industrial Code for the project is No. 50 for Wholesale Trade-Durable Goods. The facility will be located at 1705 Sammonds Road, Plant City, FL 33563. UTM Coordinates of the location are 17- 387.91E and 3098.52N.

### D. Process and Controls:

Raw sand will be brought on-site from local sand pits by dump trucks with an estimated moisture content between 3-7%. Sand will then be delivered into a hopper by a front end-loader and conveyed at a capacity of 80 tons/hr, to a natural gas fired ADM rotary sand dryer (Model #D5424). The sand dryer will be fueled by a natural gas burner rated at 27MM BTU/hr. Particulate matter (PM) emissions from the rotary sand dryer will be controlled by a 20,000 ACFM Ultra Industries, Inc. baghouse (Model #BD-225-120-II). A temperature sensor will monitor the exit temperature of the dryer to ensure it remains below the 250° F design temperature of the baghouse. Dried sand will then be conveyed from the dryer to a scalper screener, which will remove the larger undesirable particles (pebbles, etc.) from the sand. The screened material will discharge into a bucket elevator that will feed into a second screener designed to screen out the large sand size particles (#6 mesh to greater than #20 mesh), which will then be conveyed to the storage silos. Sand particles smaller than #20 mesh will discharge into a second bucket elevator that will feed the third sand screener, which will separate the sand to a size less than #45 mesh. The screened sand material will then be conveyed to the storage silos.

Sand from the various silos will be mixed in accordance to customer specifications with varying percentages of sand particle sizes. The mixed sand will either be loaded into; (1) trucks (bulk, flatbed or enclosed), or (2) super sacks (2,000 - 4,000 lb.), or (3) packed in 50 lb. bags. The PM emissions from the screeners, bucket elevators, conveyors and bagging operation will be controlled by a 5,000 ACFM Ultra Industries, Inc., baghouse (Model #BD-81-100-III). All conveyors will be partially enclosed. The facility will have a total of 8 storage silos ((2) Black Beauty and (6) dry silica sand), one truck load out, and 4 sand bag fill systems. The emissions from the silos are controlled by dual bin vents (100 and 224 ACFM, Ultra Industries, Inc. Models BB-4-58-IIG and BB-9-58-IIG dust collectors, respectively).

The facility is subject to Rule 62-296.320, F.A.C. – “General Pollutant Emission Limiting Standards”. The Rotary Sand Dryer and the sand handling operation (EU #001 and #002) are subject to the requirements of Rule 62-296.712, F.A.C., ”Miscellaneous Manufacturing Process Operation”. Also, the rotary sand dryer is subject to 40 CFR 60 Subpart UUU – Standards of Performance for Calciners and Dryers in Mineral Industries.

#### E. Application Information:

Received on: December 18, 2014

Information Requested: NA

Application Complete: January 2, 2015

## 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, General Preconstruction Review 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 a Minor Non-TV facility by state definition.

This project is not subject to the requirements of Rule 62-213, Operation Permits for Major Sources of Air Pollution, F.A.C., since the facility is a Synthetic Non-TV facility by state definition.

This project is subject to the requirements of Rule 62-296.320, General Pollutant Emission Limiting Standards, F.A.C., since the project is a source of particulate matter (PM) emissions.

This project is not subject to the requirements of Rule 62-296.340, 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 Oxides 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, Reasonably Available Control Technology - Lead, F.A.C., since there is no applicable source specific category in this rule.

This project is subject to the requirements of Rule 62-296.700, Reasonably Available Control Technology – Particulate Matter, F.A.C., specifically, Rule 62-296.712 “Miscellaneous Manufacturing Process Operation” F.A.C., since the facility will be located in a particulate matter air quality maintenance area or in the area of influence, and the emissions are greater than 15 tpy and 5 lbs/hr.

This project is subject to the requirements of Rule 62-204.800, Federal Regulations Adopted by Reference, F.A.C., specifically the rotary sand dryer is subject to 40 CFR 60 Subpart UUU – Standards of Performance 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

EU #	Description
001	Natural Gas Fired ADM (Asphalt Drum Mixer Inc. Model D5424) Rotary Sand Dryer
002	Sand Handling (conveyors, screeners, bucket elevators, truck load out, and sand bag fill systems)
003	Two Black Beauty Storage Silos
004	Four silica sand storage Silos
005	Two Silica sand storage silos (<45 Mesh)

EU #	Allowable	Opacity Limit	NOX	SOx	CO	PM	VOC
001 <sup>4</sup>	0.025 <sup>1</sup>	5%	11.48155	0.068889	9.644505	19.64 <sup>3</sup>	0.631485
002	0.03 <sup>2</sup>	5%				5.50	
003	0.03	5%				0.99	
004	0.03	5%				0.22	
005	0.03	5%				0.25	
<b>Total</b>			<b>11.48155</b>	<b>0.068889</b>	<b>9.644505</b>	<b>26.6</b>	<b>0.631485</b>

1-Subject to NSPS - 40 CFR 60 Subpart UUU

2-Subject to PM-RACT (62-296.712, F.A.C.)

3-This also includes 0.9 TPY of PM from burning natural gas

4-For EU No. 001, the NOx, SO<sub>2</sub>, and CO emissions are calculated based on the combustion of natural gas in the dryers and emission factors from AP 42 5<sup>th</sup> Edition, Ch. 1.4 – Natural Gas Combustion, Tables 1.4-1 and 1.4-2.

### 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 for the after-the-fact construction of 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:

Aaron Herwig  
President  
Florida Silica Sand Company  
2962 Trivium Circle-Suite 106  
Ft. Lauderdale, FL 33312

File No.: 0571446-001-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, Florida Silica Sand Company, applied on December 18, 2014 to the EPC for the construction of an industrial sand drying and handling facility. Florida Silica Sand Company will dry, screen and blend industrial sand. The facility, which is a Synthetic Non-Title V Source, will be located at 1705 Sammonds Road, Plant City, FL, Hillsborough County, FL, 33563.

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 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 Drive, 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 Drive, 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 must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number if known;

(b) The name, address, 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 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, 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 Diana M. Lee, 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 Statutes, 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

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Richard D. Garrity, Ph.D.  
Executive Director

cc: Florida Department of Environmental Protection (via email)  
Robert Jones, P.E. – RJones Engineering (via email)



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 an air pollution Permit No. 0571446-001-AC to Florida Silica Sand Company. The applicant applied on December 18, 2014 to the EPC for the construction of an industrial sand drying and handling facility. Florida Silica Sand Company will dry, screen and blend industrial sand. Emissions will be controlled by enclosures and fabric filters. Florida Silica Sand Company, which is Synthetic Non-Title V Source, will be located at 1705 Sammonds Road, Plant City, FL, Hillsborough County, 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 Drive, 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 must contain the following information:

- (a) The name and address of each agency affected and each agency's file or identification number if known;
- (b) The name, address, 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 Statutes, 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 Drive, 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 Drive, Tampa, Florida 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 Diana M. Lee, 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

Aaron Herwig  
President  
Florida Silica Sand Company  
2962 Trivium Circle-Suite 106  
Ft. Lauderdale, FL 33312

Re: Hillsborough County Air Permitting

Dear Mr. Herwig:

Enclosed is Draft Permit Number 0571446-001-AC for the construction of an industrial sand drying and handling facility, 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 Drive, Tampa, Florida 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/SN/sn

Florida Silica Sand Company  
Plant City, FL 33563

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cc: Florida Department of Environmental Protection (via email)  
Robert A. Jones, P.E. – RJones Engineering (via email)

CERTIFICATE OF SERVICE

This is to certify that this NOTICE OF PERMIT ISSUANCE 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 clerk, receipt of which is hereby acknowledged.

\_\_\_\_\_  
Clerk

\_\_\_\_\_  
Date

PERMITTEE:  
Florida Silica Sand Company  
1705 Sammonds Road  
Plant City, FL 33563

PERMIT/CERTIFICATION  
Draft Permit No: 0571446-001-AC  
County: Hillsborough  
Expiration Date: June 1, 2016  
Project: Sand Drying and Handling

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 of hereof and specifically described as follows:

Raw sand will be brought on-site from local sand pits by dump trucks with an estimated moisture content between 3-7%. Sand will then be delivered into a hopper by a front end-loader and conveyed at a capacity of 80 tons/hr, to a natural gas fired ADM rotary sand dryer (Model #D5424). The sand dryer will be fueled by a natural gas burner rated at 27MM BTU/hr. Particulate matter (PM) emissions from the rotary sand dryer will be controlled by a 20,000 ACFM Ultra Industries, Inc. baghouse (Model #BD-225-120-II). A temperature sensor will monitor the exit temperature of the dryer to ensure it remains below the 250° F design temperature of the baghouse. Dried sand will then be conveyed from the dryer to a scalper screener, which will remove the larger undesirable particles (pebbles, etc.) from the sand. The screened material will discharge into a bucket elevator that will feed into a second screener designed to screen out the large sand size particles (#6 mesh to greater than #20 mesh), which will then be conveyed to the storage silos. Sand particles smaller than #20 mesh will discharge into a second bucket elevator that will feed the third sand screener, which will separate the sand to a size less than #45 mesh. The screened sand material will then be conveyed to the storage silos.

Sand from the various silos will be mixed in accordance to customer specifications with varying percentages of sand particle sizes. The mixed sand will either be loaded into; (1) trucks (bulk, flatbed or enclosed), or (2) super sacks (2,000 - 4,000 lb.), or (3) packed in 50 lb. bags. The PM emissions from the screeners, bucket elevators, conveyors and bagging operation will be controlled by a 5,000 ACFM Ultra Industries, Inc., baghouse (Model #BD-81-100-III). All conveyors will be partially enclosed. The facility will have a total of 8 storage silos ((2) Black Beauty and (6) dry silica sand), one truck load out,

and 4 sand bag fill systems. The emissions from the silos are controlled by dual bin vents (100 and 224 ACFM, Ultra Industries, Inc. Models BB-4-58-IIG and BB-9-58-IIG dust collectors, respectively). The facility is subject to Rule 62-296.320, F.A.C. – “General Pollutant Emission Limiting Standards”. The Rotary Sand Dryer and the sand handling operation (EU #001 and #002) are subject to the requirements of Rule 62-296.712, F.A.C., ”Miscellaneous Manufacturing Process Operation”. Also, the rotary sand dryer is subject to 40 CFR 60 Subpart UUU – Standards of Performance for Calciners and Dryers in Mineral Industries.

Location: 1705 Sammonds Road Plant City, FL 33563.

UTM: 17- 387.91E and 3098.52N

NEDS No: 1446

Emission Unit Nos.:

- 001 – Natural Gas Fired ADM (Asphalt Drum Mixer Inc. Model D5424) Rotary Sand Dryer
- 002 – Sand Handling (conveyors, screeners, bucket elevators, truck load out, and sand bag fill systems)
- 003 – Two Black Beauty Storage Silos
- 004 – Four silica sand storage Silos
- 005 – Two Silica sand storage Silos (<45 Mesh)

Replaces Permit No.: NA

References Permit No.: NA

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. The permittee shall not cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
5. In order to limit the potential to emit, the particulate matter (PM) emissions and visible emissions (VE) from the following sources shall not exceed the following limits: [Rules 62-4.070(3), 62-200.210(PTE), and 62-296.712, F.A.C., Rule 1-3.52, Rules of the EPC, and Air Construction Application received on December 18, 2014]

A)

<u>Emission Unit</u>	<u>Source</u>	<u>PM Allowable</u>	<u>PM (TPY)</u>
001	Natural Gas Fired ADM (Asphalt Drum Mixer Inc. Model D5424) Rotary Sand Dryer	0.025 gr/dscf	19.6
002	Sand Handling (conveyors, screeners, bucket elevators, truck load out, and sand bag fill systems)	0.03 gr/dscf	5.50
003	Two Black Beauty Storage Silos	0.03 gr/dscf	0.99
004	Four silica sand storage Silos	0.03 gr/dscf	0.22
005	Two Silica sand storage Silos (<45 Mesh)	0.03 gr/dscf	0.25
	Facility Total		26.6

B) Visible emissions from each emission unit shall not exceed 5% opacity.

C) The hours of operation of the facility are not limited.

6. The inlet temperature of the dryer baghouse shall not exceed the manufacturer's maximum design temperature of 250° F. [Rule 62-4.070(3), F.A.C.]
7. In order to demonstrate compliance with the limitations of Specific Condition No. 5, the following operating limits shall not be exceeded on a twelve consecutive month period: [Rule 62-4.070(3), F.A.C., and Air Construction Application received on December 18, 2014]

<u>Process/Description</u>	<u>Limit</u>
A) Maximum sand drying rate	80 tons per hour

B) Maximum heat input of the sand dryer

27 MMBtu/hr

8. The Rotary Sand Dryer (EU #001) is limited to burning only natural gas fuel. [Rules 62-4.070(3), and 62-200.210(PTE), F.A.C., and Air Construction Application received on December 18, 2014]]
9. Each baghouse shall have a device capable of monitoring the pressure differential across the baghouse. The monitoring device shall be maintained in working order and shall be calibrated and adjusted to indicate the true value of the pressure drop with sufficient accuracy to allow the pressure drop to be determined within 10% of its true value. [Rules 62-4.070(3) and 62-297.310(5)(a) and (b), F.A.C.]
10. The baghouses controlling the sources under this permit shall be kept in good repair. [Rule 62-4.070(3), F.A.C.]
11. The permittee shall install, calibrate, maintain and operate a continuous temperature measuring device, with a 10 percent accuracy, to monitor and record the temperature prior to the inlet of the dryer baghouse. The monitoring/recording device shall collect four or more data values equally spaced over each hour. [Rule 62-4.070(3), F.A.C., 62-297.310(5)(a) and (b), F.A.C.]
12. The permittee shall not allow any person to circumvent any pollution control device or allow the emissions of air pollutants without the applicable air pollution control device operating properly. [Rule 62-210.650, F.A.C.]
13. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
14. Test emission units #001 and #002 for visible emissions at the point of highest opacity, within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 90 days after initial startup of the these emission units, and annually thereafter. Submit two copies of the test data to the Air Management Division of the Environmental Protection Commission of Hillsborough County within 45 days of such testing. The EPA Method 9 test for the emission units shall be a minimum of thirty (30) minutes in duration. Testing procedures shall be consistent with the requirements of Rule 62-297, F.A.C. [Rule 62-4.070(3), 62-297.310(4)(a)2., 62-297.310(7)(a)4., F.A.C., 40 CFR 60, Subpart A]
15. Test the sand dryer (EU No. 001) for PM emissions within 60 days after achieving the maximum production rate at which the facility will be operated, but not later than 90 days after initial startup of this emission unit. The minimum requirements for stack sampling facilities, source sampling, and reporting shall be in accordance with Rule 62-297.310, F.A.C. and 40 CFR 60, Appendix A. The EPA Method 5 test shall be used to determine the PM concentration. **The sampling time and volume for each test run shall be at least 2 hours and 1.70 dscm.** Submit two copies of the test data to the Air Management Division of the Environmental Protection Commission of Hillsborough County within 45 days of such testing. [Rules 62-4.070(3), 62-297.310(7)(a), F.A.C., 40 CFR 60 – Subpart UUU]
16. Compliance with the emission limitations of Specific Condition Nos. 5 shall be determined using EPA Methods 1, 2, 3, 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. [Rules 62-4.070(3) and 62-

297.401, F.A.C.]

17. Testing of emissions shall be conducted with the source operating at capacity. Capacity is defined as 90-100% of the rated capacity of the sand dryer at 27 MMBtu/hr and throughput of 80 TPH. If it is impracticable to test at capacity, then the source may be tested at less than capacity; in this case subsequent source 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. Failure to submit the weight of the materials processed during the test, the number of washers and dryers in operation during the test, and the temperature of the air in the dryers during the test may invalidate the test. [Rules 62-4.070(3) and 62-297.310(2)(b), F.A.C.]

18. 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.]

19. In order to demonstrate compliance with Specific Condition Nos. 5 and 8, the permittee shall maintain a monthly recordkeeping system. The records shall be maintained onsite for three years and shall be made available to any local, state, or federal air pollution agency upon request. The records shall include, but not limited to, the following: [Rules 62-4.070(3) and 62-4.160(14), F.A.C.]

- A) Month/Year
- B) Monthly total of natural gas usage combusted in the dryer (cubic feet)
- C) Monthly total of sand processed through the dryer (tons)
- D) Monthly hours of operation for each emission unit activity
- E) Daily pressure drop across baghouses (in inches of water) during normal operation;
- F) Temperature readings at the dryer baghouse inlet during normal operation, in accordance with the requirements in Specific Condition No. 11.
- G) Rolling twelve month totals of B) through D) above

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

- A) Exercise good housekeeping at all times.
- B) Paving and maintenance of roads, parking areas, and yards.
- C) Minimizing material drop height
- D) Curtailing operations if winds are entraining particulate matter
- E) Adequately watering of storage piles, as needed
- F) Removal of particulate matter from roads and other paved areas under the control of the permittee to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne
- G) Posting speed limit signs
- H) Maintaining vegetation on non-traffic areas

- D) Installing speed bumps
- J) Application of asphalt, water, or other dust suppressants to unpaved roads within the facility
- K) Enclosure or covering of conveyor systems.
- L) Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.

21. When the Environmental Protection Commission of Hillsborough County (EPC) after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in Rules 62-204, 62-210, 62-212, 62-296, or 62-297, F.A.C., or in a permit issued pursuant to those rules is being violated, it 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. [Rules 62-297.310(7)(b) and 62-4.070(3), F.A.C.]

22. 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(199), 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.

23. The permittee must submit to the Environmental Protection Commission of Hillsborough County each calendar year, a completed DEP Form 62-210.900(5), "Annual Operating Report (AOR) for Air Pollutant Emitting Facility", for the preceding calendar year. The AOR shall be submitted by April 1 of the following year. [Rule 62-210.370(3), F.A.C.]

24. 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.]

25. A minimum of two copies of an air operating permit application shall be submitted, along with an O&M Plan for the baghouses controlling emissions from EU Nos. 001 and 002, to the Environmental Protection Commission of Hillsborough County within 60 days of completion of the compliance tests or at least 90 days prior to the expiration date of this permit, whichever occurs first. [Rules 62-4.050(2) and 62-4.090, F.A.C.]

ENVIRONMENTAL PROTECTION COMMISSION  
OF HILLSBOROUGH COUNTY

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Richard D. Garrity, Ph.D.

Executive Director