

FINAL DETERMINATION

PERMITTEE

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

PERMITTING AUTHORITY

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

PROJECT

Air Permit No. 0571446-004-AC
Minor Air Construction Permit
Florida Silica Sand Company

This permit authorizes the construction of a new Black Beauty Bagging Station at the existing Florida Silica Sand facility.

NOTICE AND PUBLICATION

The EPC distributed a draft minor air construction permit package on October 5, 2016. The applicant published the Public Notice in the Tampa Bay Times on October 8, 2016. The EPC received the proof of publication on October 11, 2016. No requests for administrative hearings or requests for extensions of time to file a petition for administrative hearing were received.

COMMENTS

No comments on the Draft Permit were received from the public, the EPA Region 4 Office or the applicant.

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PERMITTEE

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

Air Permit No.0571446-004-AC
 Permit Expires: December 30, 2017
 Minor Air Construction Permit
 New Black Beauty Bagging Station

Authorized Representative:
 Aaron Herwig, Vice President

PROJECT

This air construction permit authorizes the construction of a new Black Beauty Bagging Station. The proposed work will be conducted at the existing facility, which is a sand drying and handling facility categorized under Standard Industrial Classification No. 5032 – Wholesale Trade-Durable Goods. The existing facility is located in Hillsborough County at 1705 Sammonds Road, Plant City, FL 33563. The UTM coordinates of the existing facility are Zone 17, 387.91 km East, and 3098.52 km North.

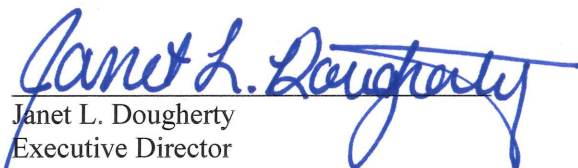
This permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

STATEMENT OF BASIS

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

Executed in Hillsborough County, Florida.

ENVIRONMENTAL PROTECTION
 COMMISSION OF HILLSBOROUGH COUNTY


 Janet L. Dougherty
 Executive Director

Environmental Excellence in a Changing World

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DRAFT PERMIT

CERTIFICATE OF SERVICE

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

Aaron Herwig – Vice President, Florida Silica Sand Company (aherwig@fsscompany.com)

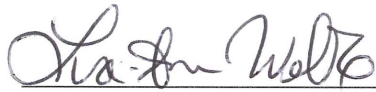
Joe Dudley - Inside Sales Manager, Florida Silica Sand Company (jdudley@fsscompany.com)

Jeff Grothoff – Plant Manager, Florida Silica Sand Company (jgrothoff@fsscompany.com)

Lynn Robinson, P.E. – Southern Environmental Sciences, Inc. (lrobinson@sesfla.com)

Florida Department of Environmental Protection, Southwest District (posting online)

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



Clerk

10/24/2016

Date

SECTION 1. GENERAL INFORMATION

FACILITY DESCRIPTION

The existing facility consists of the following emissions units.

Facility ID No.0571446	
ID No.	Emission Unit Description
001	Natural Gas Fired ADM (Asphalt Drum Mixer Inc. Model D5424) Rotary Sand Dryer
002	Sand/Black Beauty Handling (conveyors, screeners, bucket elevators, truck load out, and sand/Black Beauty bag fill systems)
003	Two Black Beauty Storage Silos
004	Six silica sand storage Silos

Raw sand is brought on-site from local sand pits by dump trucks 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 is fueled by a natural gas burner rated at 27MM BTU/hr. Particulate matter (PM) emissions from the rotary sand dryer is controlled by a 20,000 ACFM Ultra Industries, Inc. baghouse (Model #BD-225-120-III). A temperature sensor monitors the exit temperature of the dryer to ensure it remains below the 375° F design temperature of the baghouse's NOMEX filter material. Dried sand is then conveyed from the dryer to a scalper screener, which removes the larger undesirable particles (pebbles, etc.) from the sand. The screened material is discharged into a bucket elevator that feeds into a second screener designed to screen out the large sand size particles (#6 mesh to greater than #20 mesh), which then is conveyed to the storage silos. Sand particles smaller than #20 mesh are discharged into a second bucket elevator that feeds the third sand screener, which separates the sand to a size less than #45 mesh. The screened sand material is then conveyed to the storage silos. Similarly, the facility also receives Black Beauty slag material that is conveyed directly from trucks to one of two silos.

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

PROPOSED PROJECT

This permit authorizes the construction of a new Bagging Station dedicated to the Black Beauty silos. According to the proposal, instead of using a belt conveyor to move Black Beauty from the silos to the bagging station, Black Beauty will flow through pipes, from the bottom of the two silos, directly down into a new bagging station. This bagging station will have two baggers, a 50-lb and a "super sack" bagger. In Phase 1, the new 50-lb bagger will be installed, and Phase 2 will involve installing the new super-sack bagger, if needed. The emission from the new bagging station will be vented to the existing 5,000 acfm Ultra Industries, Inc. baghouse.

This project will not increase the PM PTE for the facility, which is estimated at 26.5 tons per year. Based on the information provided by the facility, the actual PM emissions have been estimated to increase by 0.2 tons per year.

The facility is subject to Rule 62-296.320, F.A.C. – "General Pollutant Emission Limiting Standards". The sand handling operation (EU #002) is subject to the requirements of Rule 62-296.712, F.A.C., "Miscellaneous Manufacturing Process Operation".

SECTION 1. GENERAL INFORMATION

This project will modify the following emissions units:

Facility ID No.0571446	
ID No.	Emission Unit Description
002	Sand/Black Beauty Handling (conveyors, screeners, bucket elevators, truck load out, and sand/Black Beauty bag fill systems)

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility does not operate units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is not a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Environmental Protection Commission of Hillsborough County. The mailing address is 3629 Queen Palm Dr., Tampa, Florida 33619. All documents related to applications for permits to operate an emissions unit shall be submitted to the Environmental Protection Commission of Hillsborough County.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Environmental Protection Commission of Hillsborough County at: 3629 Queen Palm Dr., Tampa, Florida 33619.
3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); Appendix D (Common Testing Requirements).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the EPCHC may require the permittee to conform to new or additional conditions. The EPCHC shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the EPCHC may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the EPCHC. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Construction and Expiration: The expiration date shown on the first page of this permit provides time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding this expiration date, all specific emissions limitations and operating requirements established by this permit shall remain in effect until the facility or emissions unit is permanently shut down. For good cause, the permittee may request that that a permit be extended. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Permitting Authority in writing before the permit expires. [Rules 62-4.070(4), 62-4.080 & 62-210.300(1), F.A.C.]
8. Application for a Non-Title V Operating Permit: This permit authorizes construction of the permitted emissions unit(s) and initial operation to determine compliance with Department rules. A Non-Title V air operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Non-Title V air operation permit at least 90 days prior to expiration of this permit, but no later than 60 days after completion of one of the compliance testing scenarios specified under Specific Condition No. B.6. To apply for a Non-Title V operation permit, the applicant shall submit the appropriate application form, the appropriate permitting fee, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Environmental Protection Commission of Hillsborough County. [Rules 62-4.030 and 62-4.050, F.A.C.]
9. Annual Operating Report (AOR): The information required by the Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Environmental Protection Commission of Hillsborough County. All

SECTION 2. ADMINISTRATIVE REQUIREMENTS

synthetic non-Title V sources shall submit a completed DEP Form 62-210.900(5) unless the annual operating report is submitted using the DEP's electronic annual operating report software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. [Rule 62-210.370(3), F.A.C.]

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

10. 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.]
11. The permittee shall not cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]
12. The baghouses controlling the sources under this permit shall be kept in good repair. [Rule 62-4.070(3), F.A.C.]
13. 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.]
14. 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.]
15. At least 15 days prior to the date on which each required emissions test is to begin, the owner or operator shall notify the air compliance program identified by permit, unless shorter notice is agreed to by the appropriate air compliance program. The notification shall include the date, time, place of each such test, Facility ID Number, Emission Unit ID Number(s) and description(s), Emission Point Number(s) and description(s), test method(s), pollutant(s) to be tested, along with the name and telephone number of the person who will be responsible for conducting such test(s) for the owner or operator. If a scheduled emissions test needs to be re-scheduled, the owner or operator shall submit to the appropriate air compliance program a revised notification at least seven days prior to the re-scheduled emissions test date or arrange a re-scheduled test date with the appropriate air compliance program by mutual agreement. [Rule 62-297.310(9), F.A.C.]
16. 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.]
17. 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,

SECTION 2. ADMINISTRATIVE REQUIREMENTS

unloading, storing and handling. Reasonable precautions shall include, but are not limited to the following: [Rule 62-4.070(3) and 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
- i. Enclosure or covering of conveyor systems.
- j. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. Sand/Black Beauty Handling

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
002	Sand/Black Beauty Handling (conveyors, screeners, bucket elevators, truck load out, and sand/Black beauty bag fill systems)

Dried sand is conveyed from the dryer to series of screeners and bucket elevators to be separated by size and conveyed to the appropriate storage silo. The PM emissions from the screeners, bucket elevators, conveyors and bagging operation are controlled by a 5,000 ACFM Ultra Industries, Inc., baghouse (Model #BD-81-100-III). All conveyors are partially enclosed.

EQUIPMENT

- B.1.** Equipment: The permittee is authorized to construct a new Black Beauty Bagging Station. [Application No. 0571446-004-AC]

PERFORMANCE RESTRICTIONS

- B.2.** Restricted Operation: The maximum sand handling rate shall not exceed 80 tons per hour. [Rule 62-4.070(3), F.A.C., Permit No. 0571446-002-AC]
- B.3.** Restricted Operation: The hours of operations are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.; Permit No. 0571446-002-AC]

EMISSIONS STANDARDS

- B.4.** Visible Emissions Standards: Visible emissions from the Sand Handling (EU No. 002) shall not exceed 5% opacity [Rules 62-4.070(3) and 62-296.712, F.A.C.; Chapter 1-3.52, Rules of the EPC]
- B.5.** Particulate Emissions Standards: In order to limit the potential to emit and establish the facility as a synthetic minor for PM, the allowable particulate matter emissions from the baghouse associated with EU No. 002 shall not exceed 0.03 grains/dscf and 5.5 tons per any twelve consecutive month period. [Rules 62-4.070(3) and 62-296.712, F.A.C.; Permit No. 0571446-004-AC]

TESTING REQUIREMENTS

- B.6.** Initial Compliance Test: In order to demonstrate compliance with Specific Condition No. B.4, the following shall apply: [Rules 62-4.070(3) and 62-297.310 and, F.A.C.]
- Test the exhaust of the baghouse, while handling Black Beauty, for visible emissions the first time Black Beauty is processed through the new bagging station.
 - Test the exhaust of the baghouse for visible emissions the first time that sand and Black Beauty are processed through the two bagging stations, simultaneously.
- B.7.** Annual Compliance Tests: During each calendar year (January 1st - December 31st), the Sand/Black Beauty Handling operation (EU No. 002) shall be tested for visible emissions. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. [Rules 62-4.070(3) and 62-297.310 and, F.A.C.]
- B.8.** Testing of emissions shall be conducted with the source operating at capacity. If it is impracticable to test at the testing capacity, an emissions unit may be tested at less than the testing capacity. If an emissions unit is tested at less than the testing capacity, another emissions test shall be conducted and completed no later than 60 days after the emissions unit operation exceeds 110% of the capacity at which its most recent

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

B. Sand/Black Beauty Handling

emissions test was conducted. Failure to submit the processing rates during the test may invalidate the test. [Rules 62-4.070(3) and 62-297.310(3), F.A.C.]

- B.9.** Test Methods: Required tests shall be performed in accordance with the following reference method:

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

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. The EPA Method 9 test for the emission units shall be a minimum of thirty (30) minutes in duration. [Rules 62-4.070(3), 62-204.800, F.A.C.; Appendix A of 40 CFR 60]

MONITORING REQUIREMENTS

- B.10.** The Sand/Black Beauty Handling baghouse (EU No. 002) 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(6)(a) and (b), F.A.C.]

RECORDS AND REPORTS

- B.11.** In order to ensure compliance with Specific Condition Nos. B.2 and B.5, the following monthly records shall be kept for the previous three (3) years and made available to the EPC, state, or federal air pollution agency upon request: [Rules 62-4.070(3) and 62-4.160(14)(b), F.A.C.]
- Month/Year
 - Monthly total of sand and Black Beauty handled (tons)
 - Monthly hours of operation of the baghouse
 - Daily pressure drop across baghouses (in inches of water), when operated
- B.12.** The permittee shall submit a written test report to the Air Compliance Section of the Environmental Protection Commission of Hillsborough County, on the results of each such test as soon as practicable but no later than 45 days after the last run of each test is completed. [Rule 62-297.310(10), F.A.C.]