Florida Department of Environmental Protection

Southwest District
13051 N. Telecom Parkway
Temple Terrace, Florida 33637-0926

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard, Jr.
Secretary

FINAL PERMIT

PERMITTEE
Standard Carbon LLC
551 North U.S. Highway 41
Dunnellon, FL 34432

Authorized Representative:
Mr. James Sharpe, CEO

Air Permit No. 0830170-005-AC
Permit Expires: 12/31/2012
Minor Air Construction Permit

Construction Permit for Carbon Storage Silo No. 4 with Baghouse Emission Control Device

This is the final air construction permit, which authorizes modifications to this existing activated carbon production facility (Standard Industrial Classification No. 2819). The facility is located in Marion County at 551 North US Highway 41 in Dunnellon, Florida. The UTM coordinates are Zone 17, 360.2 km East, and 3230.0 km North. As noted in the Final Determination provided with the final permit, no changes or only minor changes and clarifications were made to the draft permit.

This final document is organized by the following sections:

Section 1. General Information

Section 2. Administrative Requirements

Section 3. Emissions Unit Specific Conditions

Section 4. Appendices

Because of the technical nature of the project, this document contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this document.

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

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the 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 30 days after this order is filed with the clerk of the Department.

Executed in Hillsborough County, Florida

Cindy Zhang-Torres December 29, 2011

Cindy Zhang-Torres, P.E.
Air Permitting Manager
Southwest District

Effective Date

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination, the Final Permit and the Appendices) 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 12/29/2011 to the persons listed below.

Mr. James Sharpe, CEO, Standard Carbon LLC
(jsharpe@standardpurification.com)

Mr. Kenneth E. Given, P.E., Air Testing & Consulting, Inc.
(ken@airtest.fdn.com)

Clerk Stamp

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.

Carol L. Moore 12/29/2011
(Clerk) (Date)

FACILITY AND PROJECT DESCRIPTION

Existing Facility

This facility produces activated carbon using recovered fly ash as a raw material.

See Operation Permit 0830170-002-AO and Construction Permit 0830170-004-AC for listings of emission units (EUs), detailed facility and emission unit process descriptions, and modifications to the facility authorized by the above construction permit.

Project Description and Affected/Proposed Emission Units

This construction permit authorizes the refurbishment and operation of existing currently not-in-use Silo No. 4 to store carbon product material. Emissions from transfer of carbon product to Carbon Storage Silo No. 4 will be controlled by existing baghouse particulate matter (PM) emission control device Baghouse PJ-4, a Kinetic Air Model 12-RS-84. *(Note - Baghouse PJ-4 was previously the emission control device for EU No. 009 (Carbon Storage Silo Nos. 8, 10, and 12), but was authorized to be removed (and replaced by PJ-2) as part of recently issued construction permit 0830170-004-AC.)*

This project will create the following emissions unit (EU):

EU ID No.	Emission Unit Description	Associated PM Emission Control Device
017	Material Transfer to Carbon Storage Silo No. 4.	Baghouse PJ-4 (Kinetic Air Model 12-RS-84)

Exempt Emission Units/Activities

See Construction Permit 0830170-004-AC

FACILITY REGULATORY CLASSIFICATION

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

PERMIT HISTORY/AFFECTED PERMITS

Reference also facility Air Operation Permit 0830170-002-AO and Air Construction Permit No. 0830170-004-AC.

ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority - The permitting authority for this project is the Florida Department of Environmental Protection (Department), Southwest District's Air Resource Management Section. The Southwest District's mailing address and phone number is:

   Florida Department of Environmental Protection
   Southwest District Office
   Air Resource Management Section
   13051 North Telecom Parkway
   Temple Terrace, Florida 33637-0926
   Telephone: 813-632-7600

   All documents related to applications for permits shall be submitted to the above address.

2. Compliance Authority - All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Southwest District Office's Air Resource Management Section (see above mailing address and phone number).

3. Appendices - The following Appendices are attached as part of this document: (add appendices as necessary)

   a. Appendix A. Citation Formats and Glossary of Common Terms;
   b. Appendix B. General Conditions;
   c. Appendix C. Common Conditions; and
   d. Appendix D. Common Testing Requirements.

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

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

6. Modifications - Unless otherwise exempt by rule, the permittee shall not initiate any construction, reconstruction, or modification at the facility and shall not install/modify any pollution control device at the facility without obtaining prior authorization from the Department. Modification is defined as: Any physical change or changes in the method of operations or addition to a facility that would result in an increase in the actual emissions of any air pollutant subject to air regulations, including any not previously emitted, from any emission unit or facility.
   [Rules 62-210.200 - Definition of "Modification" and 62-210.300(1)(a), F.A.C.]

7. Annual Operating Report - On or before **April 1** of each year, the permittee shall submit a completed DEP Form 62-210.900(5), "Annual Operating Report for Air Pollutant Emitting Facility" (AOR) for the preceding calendar year. The report may be submitted electronically in accordance with the instructions received with the AOR package sent by the Department, or a hardcopy may be sent to the Compliance Authority.
[Rule 62-210.370(3), F.A.C.]

8. Application for Non-Title V Air Operation Permit Revision - This permit authorizes modification of the permitted emissions unit and initial operation to determine compliance with Department rules. A Non-Title V air operation permit revision is required for continued operation of the permitted emissions unit. The permittee shall apply for a Non-Title V air operation permit revision at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation of Carbon Storage Silo No. 4. *(Note - see Specific Condition No. A.6. for start of operation notification requirement)*. Commencing operation means setting into operation of any emissions unit for any purpose. To apply for a Non-Title V air operation permit revision, the applicant shall submit the following:

   a. the appropriate permit application form *(see current version of Rule 62-210.900, F.A.C. (Forms and Instructions), and/or FDEP Division of Air Resource Management website at: http://www.dep.state.fl.us/air/)*;

   b. the appropriate operation permit application fee from Rule 62-4.050(4)(a), F.A.C.; and

   c. a copy of the initial visible emissions (VE) compliance test report required by Specific Condition Nos. A.3. and A.8., if not previously submitted.

   [Rules 62-4.030, 62-4.050, 62-4.070(3), 62-4.090, 62-210.300(2), and 62-210.900, F.A.C.]

A. EU No. 017- Carbon Storage Silo No. 4

This section of the document addresses the following emissions unit (EU) (and associated particulate matter (PM) emission control device). *(See more detailed description below the emissions unit (EU) table.)*

EU ID No.	Emission Unit Description	Associated PM Emission Control Device
017	Material Transfer to Carbon Storage Silo No. 4.	Baghouse PJ-4 (Kinetic Air Model 12-RS-84)

NOTE - Please reference the Permit No., Facility ID, and Emission Unit ID in all correspondence, test report submittals, applications, etc.

More Detailed Emission Unit Description

Carbon Storage Silo No. 4 will be used as a blending tank to combine the Carbon Storage Silo Nos. 9 and 11 (EU No. 002) tank super sack powdered activated carbon material with the activated carbon product stored in Carbon Storage Silo Nos. 8, 10 or 12 (EU No. 009). Material blended in Carbon Storage Silo No. 4 can then be transferred to bagging for packaging, back to Carbon Storage Silo Nos. 8, 10, or 12 for storage of the blended product, or to Carbon Storage Silo Nos. 14 or 16 (EU Nos. 010 and 014) for bulk load-out. Carbon Storage Silo No. 4 will not receive Raymond Mill carbon product directly.

Emission from transfer of carbon product to Carbon Storage Silo No. 4 will be controlled by baghouse PM emission control device PJ-4, a Kinetic Air Model 12-RS-84 with a design air flow rate of 600 acfm.

Material Transport Blowers Note *- All of the blowers used to transport fly ash and activated carbon product have fixed speeds (i.e., material is transported at a fixed rate).*

The following Specific Conditions apply to the above emission unit (EU).

PERFORMANCE RESTRICTIONS

A.1. Permitted Hours of Operation - This emissions unit permitted to operate continuously (i.e., for 8760 hours/year).
[Rule 62-210.200 (Definition of Potential to Emit), F.A.C.; as requested by applicant in construction permit application dated 10/11/11]

EMISSIONS STANDARDS

A.2. Visible Emissions (VE) Limitation For Material Storage Silo - In order to provide reasonable assurance that the material (activated carbon) storage silo baghouse PM emission control device is operating properly in accordance with Section 4. Appendix C, Condition 2. (Circumvention of Control Equipment), the Department establishes a visible emission (VE) limitation not to exceed an opacity of 5% from the baghouse PJ-4 exhaust.
[Rules 62-4.070(3), and 62-210.650, F.A.C.]

COMPLIANCE TESTING REQUIREMENTS

A.3. Initial and Annual Visible Emissions (VE) Compliance Tests - Within 45 days of the initial operation of Carbon Storage Silo No. 4 *(see Specific Condition No. A.6.)*, the permittee shall conduct the initial visible emissions (VE) compliance test on the exhaust vent for the baghouse control device for this silo to demonstrate compliance with the visible emissions (VE) standards of Specific Condition No. A.2. After the initial compliance testing, the exhaust vent for the baghouse PM emission control device listed shall be tested during each federal fiscal year (October 1st to September 30th). The activities required to be in operation during the compliance testing periods are shown below. Testing of emissions from material transfer operations shall be conducted during material transfer/silo loading conditions that are representative of normal transfer operations[1].

EU ID No.	Baghouse ID	Operations to be conducted during emissions testing[1]
017	PJ-4	Transfer of activated carbon from Carbon Storage Silos 8, 10 or 12, or powdered activated carbon from Flyash/Carbon Storage Silo Nos. 9 or 11 [2]

Notes -

[1] *Material Transfer Rate Operations Permitting Note - Based on the fact that the material transfer blowers will operate at fixed speeds, the material transfer rate is assumed to be constant.*

[2] *Material Transfer Operations Permitting Note - This silo can receive activated carbon from any of the listed carbon storage silos. For compliance testing purposes, it does not matter which of the multiple silos material is being transferred from as long as material is being transferred to Silo No. 4 during the entire test period.*

[Rule 62-297.310, F.A.C.]

A.4. Test Method - Required visible emissions compliance 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 Method 9 VE compliance tests shall be conducted by a certified observer and be a minimum of 30 minutes in duration. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur

The above method is described in Appendix A of 40 CFR 60 and is adopted by reference in Rule 62-204.800, F.A.C. No other method may be used unless prior written approval is received from the Department.
[Rules 62-204.800, 62-296.320(4)(b)4, 62-297.310(4)(a)(2), 62-297.320, and 62-297.401; and Appendix A of 40 CFR 60]

A.5. Compliance Test Requirements - Compliance tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit.
[Rule 62-297.310, F.A.C.]

NOTIFICATION REQUIREMENTS

A.6. Notification of Start of Operation of Carbon Storage Silo No. 4 - The permittee shall notify the Compliance Authority of the date of start of operation of Carbon Storage Silo No. 4, defined as the first transfer of material to the silo. The written notifications shall be sent within 15 days of the first such transfer operation.
[Rule 62-4.070(3), F.A.C.]

(Permitting Note – See also Specific Condition No. A.3. for initial VE testing requirements for this silo.)

A.7. Compliance Test Notification - The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required compliance tests. The notification must include the following information: the date, time, and location of each test; the name and telephone number of the facility's contact person who will be responsible for coordinating the test; and the name, company, and the telephone number of the person conducting the test.

(Permitting Note - The notification should also include the relevant emission unit ID No(s)., test method(s) to be used, and pollutants to be tested.)

[Rules 62-4.070(3) and 62-297.310(7)(a)9., F.A.C.]

REPORTS

A.8. Test Reports - The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. The compliance test reports) shall include a statement of the Carbon Storage Silo No. 4 material transfer operations that were being done during the test period, and a statement of whether they represented normal operating conditions and transfer rates.
[Rules 62-4.070(3) and 62-297.310(8), F.A.C.]