

Moore, Carol

From: Moore, Carol
Sent: Tuesday, September 06, 2011 1:49 PM
To: 'jsharpe@standardpurification.com'
Cc: 'ken@airtest.fdn.com'; Zhang-Torres; Zell, David; Prickett, Patricia
Subject: STANDARD CARBON, LLC; 0830170-004-AC
Attachments: 0830170.004.ac.d.Standard Carbon.Pub Not.doc; 0830170.004.ac.d.Standard Carbon.signaturepage.pdf

Importance: High

Tracking:	Recipient	Delivery	Read
	'jsharpe@standardpurification.com'		
	'ken@airtest.fdn.com'		
	Zhang-Torres	Delivered: 9/6/2011 1:49 PM	Read: 9/6/2011 1:49 PM
	Zell, David	Delivered: 9/6/2011 1:49 PM	
	Prickett, Patricia	Delivered: 9/6/2011 1:49 PM	

Attention: Mr. James Sharpe, CEO

Owner/Company Name: STANDARD CARBON, LLC
Facility Name: STANDARD CARBON, LLC
Project Number: 0830170-004-AC
Permit Status: DRAFT
Permit Activity: CONSTRUCTION
Facility County: MARION

Click on the following link to access the permit project documents:
http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0830170.004.AC.D_pdf.zip

Dear Mr. Sharpe:

IMPORTANT: We must receive verification, by email, stating that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

Attached is the official Written Notice of Intent to Issue Air Permit for the project referenced above. The Written Notice of Intent to Issue Air Permit (including the Draft Permit and the Attachments) has been posted on the Department of Environmental Protection's Southwest District website.

Click on the link displayed above to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

Permit project documents that are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

The Southwest District is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at <http://www.dep.state.fl.us/air/emission/apds/default.asp>.

For your convenience, I have also attached the Public Notice of Intent to Issue Air Permit in a word document.

If you should have any questions, please contact David Zell, the Permit Engineer at David.Zell@dep.state.fl.us.

Sincerely,

Carol L. Moore
Administrative Assistant
Florida Dept. of Environmental Protection
Southwest District Air Resources
13051 N. Telecom Parkway
Temple Terrace, FL 33510
(813) 632-7600, ext. 111
Fax: (813) 632-7668
carol.moore@dep.state.fl.us

Please Note: Florida has a very broad Public Records Law. Most written communications to or from State and Local Officials regarding State or Local business are public records available to the public and media upon request. Your email communications may therefore be subject to public disclosure.



Florida Department of Environmental Protection

Southwest District Office
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

Mr. James Sharpe, CEO
Standard Carbon LLC, dba Standard Purification
551 North U.S. Highway 41
Dunnellon, FL 34432

Re: Project No. 0830170-004-AC
Minor Air Construction Permit for Modifications

Dear Mr. Sharpe:

On June 23, 2011, you submitted an air construction permit application requesting authorization for modifications at the existing activated carbon production facility located in Marion County at 551 North Highway 41 in Dunnellon, Florida. Enclosed are the following documents: the Technical Evaluation and Preliminary Determination; the Draft Permit and Appendices; the Written Notice of Intent to Issue Air Permit; and the Public Notice of Intent to Issue Air Permit. The Public Notice of Intent to Issue Air Permit is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project. If you have any questions, please contact the project engineering specialist, David Zell, at david.zell@dep.fl.us or by phone at (813) 632-7600 extension 118.

Sincerely,

A handwritten signature in cursive script that reads "Cindy Zhang-Torres".

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

Enclosures

CZT/pp/drz

WRITEN NOTICE OF INTENT TO ISSUE AIR PERMIT

*In the Matter of an
Application for Air Permit by:*

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

Project No. 0830170-004-AC
Minor Air Construction Permit
Marion County, Florida

Authorized Representative:
Mr. James Sharpe, CEO

Construction Permit for Facility
Modifications

Facility Location: Standard Carbon LLC, dba Standard Purification operates the existing activated carbon production facility located in Marion County at 551 North Highway 41 in Dunnellon, Florida.

Project: The applicant proposes to make modifications to the existing facility consisting of the following: an increase to the maximum permitted fuel heat input rates for the combustion chambers on both kilns; replacement of a baghouse emission control device; addition of an existing currently not-in-use baghouse emission control device to control emissions from emission units previously controlled by another shared baghouse; modification of the flyash receiving/unloading area to allow receipt and unloading of super sacks of powered activated carbon received from offsite; addition of a shaker screen to remove sand from the kiln product prior to milling. Details of the project are provided in the application and the enclosed Technical Evaluation and Preliminary Determination.

Permitting Authority: Applications for air construction and operation permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Permitting Authority responsible for making a permit determination for this project is the Department of Environmental Protection's Air Resource Management Section in the Southwest District Office. The Permitting Authority's physical address is: 13051 North Telecom Parkway, Temple Terrace, Florida 33637-0926. The Permitting Authority's mailing address is: 13051 North Telecom Parkway, Temple Terrace, Florida 33637-0926. The Permitting Authority's telephone number is 813/632-7600.

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

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

WRITTEN NOTICE OF INTENT TO ISSUE A PERMIT

this notice results in a different decision or a significant change of terms or conditions.

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

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

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/245-2241). Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

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

Mediation: Mediation is not available in this proceeding.

Executed in Hillsborough County, Florida.

Cindy Zhang-Torres

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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Air Permit package (including the Written Notice of Intent to Issue Air Permit, the Public Notice of Intent to Issue Air Permit, the Technical Evaluation and Preliminary Determination and the Draft Permit) 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 9/6/2011 to the persons listed below.

Mr. Mr. James Sharpe, 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 S. Moore
(Clerk)

9/6/2011
(Date)

PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection
Air Resource Management, Southwest District Office
Draft Minor Air Construction Permit
Project No. 0830170-004-AC
Standard Carbon LLC, dba Standard Purification
Marion County, Florida

Applicant: The applicant for this project is Standard Caron LLC. The applicant's authorized representative and mailing address is: Mr. James Sharpe, CEO, Standard Carbon LLC, dba Standard Purification, 551 North Highway 41, Dunnellon, Florida, 34432.

Facility Location: Standard Carbon, dba Standard Purification, operates the existing activated carbon production facility, located in Marion County at 551 North Highway 41 in Dunnellon, Florida.

Project: The proposed project is authorization for modifications to the existing facility consisting of the following: an increase to the maximum permitted fuel heat input rates for the combustion chambers on both kilns; replacement of a baghouse emission control device; addition of an existing currently not-in-use baghouse emission control device to control emissions from emission units previously controlled by another shared baghouse; modification of the flyash receiving/unloading area to allow receipt and unloading of super sacks of powered activated carbon received from offsite; and addition of a shaker screen to remove sand from the kiln product prior to milling. The increase in maximum permitted kiln combustion chamber fuel heat input rates will result in an increase of potential emissions of nitrogen oxides (NO_x) and carbon monoxide (CO) of 8.7 tons/year and 2.2 tons/year respectively.

Permitting Authority: Applications for air construction and operation permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Permitting Authority responsible for making a permit determination for this project is the Department of Environmental Protection's Air Resource Management Section in the Southwest District Office. The Permitting Authority's physical address is: 13051 North Telecom Parkway, Temple Terrace, Florida 33637-0926. The Permitting Authority's mailing address is: 13051 North Telecom Parkway, Temple Terrace, Florida 33637-0926. The Permitting Authority's telephone number is 813/632-7600.

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

Notice of Intent to Issue Air Permit: The Permitting Authority gives notice of its intent to issue an air construction permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed

under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

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

Petitions: A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/245-2241). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S. must be filed within 14 days of publication of this Public Notice or receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

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

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

Mediation: Mediation is not available for this proceeding.



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

DRAFT PERMIT

PERMITTEE

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

Air Permit No. 0830170-004-AC
Permit Expires: 12/31/2012
Minor Air Construction Permit

Authorized Representative:
Mr. James Sharpe, CEO

Construction Permit for Modifications

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. Facility-wide and 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

DRAFT

Cindy Zhang-Torres, P.E. Air Permitting Manager Southwest District	Effective Date
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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 _____ to the persons listed below.

Mr. James Sharpe, CEO, Standard Carbon LLC
(jsharp@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.

DRAFT

(Clerk)

(Date)

SECTION 1. GENERAL INFORMATION (DRAFT)

FACILITY AND PROJECT DESCRIPTION

Existing Facility

This facility produces activated carbon using recovered fly ash as a raw material. The production process is described in the emission units sections of the permit (Section 3. Emissions Unit Specific Conditions).

The existing facility consists of the following emissions units*.

Facility ID No. 0830170		
EU ID No.	Emission Unit Description	Associated PM Emission Control Device
001	Dry Fly Ash Truck Receiving/Unloading	Baghouse PJ-T (Kinetic Air Model 100-SL-120)
002	Transfer to Fly Ash/Carbon Storage Silo Nos. 9 & 11	Baghouse PJ-1 (Kinetic Air Model 72-SL-120)
003	Transfer to Kiln Fly Ash Feed Hoppers K1 (for Kiln No. 1) & K2 (for Kiln No. 2)	Baghouse PJ-2 (Kinetic Air Model 36-BV-84)
004	Kiln No. 2	SDC Model 48-SL-108
005	Kiln No. 1	SDC Model 48-SL-108
006	Raymond Mill and Raymond Mill Outlet Hopper	Mikro-Pulsaire Model 64S820
007	Kiln Surge Hopper and Raymond Mill Receiving Hopper	Baghouse PJ-3 (Kinetic Air Model 12-RS-84)
009	Transfer from Raymond Mill Outlet Hopper to Carbon Storage Silo Nos. 8, 10 & 12	Baghouse PJ-4 (Kinetic Air Model 12-RS-84)
010	Transfer from Carbon Storage Silos 8, 10 & 12 (or Fly Ash/Carbon Storage Silos 9 and 11) to Carbon Storage Silo Nos. 14 & 16	Baghouse PJ-6 (Kinetic Air Model 16-RS-84)
011	Bulk Truck/Railcar Loading from Carbon Storage Silos 14 & 16	Baghouse PJ-6 (Kinetic Air Model 16-RS-84)
012	Material Transfer to Carbon Bagging Storage Tower	Flex-Kleen Model 84BVBS-25
013	Material Transfer to Carbon Bagging Hopper, and to Bagging Unit	Mahle Model 25-K

(* EU No. Note - EU No. 008 is no longer included in the facility as permitted. (See the Technical Evaluation and Preliminary Determination for Construction Permit 0830170-003-AC for details).)

Project Description and Affected/Proposed Emission Units

This construction permit, which replaces Air Construction Permit 0830170-003-AC, authorizes the modifications described below. (See the Technical Evaluation document for the effect on potential emissions from each of these modifications.)

SECTION 1. GENERAL INFORMATION (LRAFT)

- Increasing the maximum permitted kiln combustion chamber fuel heat input rates from 8 MMBtu/hr to 19 MMBtu/hr for Kiln No. 1, and from 8 MMBtu/hr to 11.8 MMBtu/hr for Kiln No. 2, through combustion chamber blower modifications.

(This affects existing EU Nos. 004 (Kiln No. 2) and 005 (Kiln No. 1), and will require creation of new EU Nos. 015 (Kiln No. 1 Combustion Chamber) and 016 (Kiln No. 2 Combustion Chamber)*. (* Note – These kiln combustion chambers were previously considered exempt from air permitting under Rule 62-210.300(3), F.A.C.)

- Replacement of existing Carbon Storage Silo Nos. 8, 10 and 12 emission control Baghouse PJ-4 with, currently not being used, existing EU 003 Baghouse PJ-2.

(This modification will affect EU No. 009, and also EU No. 003, which currently shows Baghouse PJ-2 as the PM emissions control device. EU No. 003 which is currently not being used to pneumatically transfer dry fly ash due to the use of wet fly ash as a raw material instead of dry fly ash) will be shown without an associated PM emission control device.)

- Modification of the fly ash receiving/unloading area (EU No. 001) to receive and unload very large bags (super sacks) of powdered activated carbon (from fly ash from combustion of coal). This powdered activated carbon will be pneumatically transferred to Fly Ash/Carbon Silo Nos. 9 or 11 (EU No. 002), or to Carbon Storage Silo Nos. 8, 10, or 12 (EU No. 009). This powdered activated carbon will be mixed with activated carbon (from fly ash from combustion of wood) produced by the Standard Carbon facility to create a blended final product.

(This modification affects EU Nos. 001, 002, and 009.)

- Addition of a shaker screen between the Kiln Surge Hopper and the Raymond Mill Receiving Hopper (EU No. 007) to remove sand from the kiln product prior to milling. All of the equipment associated with this shaker screen (feeder equipment, shaker screen, and outlet equipment) is enclosed such that there are no direct air emissions from this operation. Sand separated out in the shaker screen will pass through a rotary air lock into an enclosed bin, dropping by gravity. This bin will be changed out periodically. The remainder of the material stream (product) will drop into the Kiln Surge Hopper. Any PM from the screening operation will be carried by the air stream to the Raymond Mill Receiving Hopper and the associated Baghouse PJ-3 emission control device.

(This modification indirectly affects EU No. 007, as the shaker screen will be added to the description of this emission unit.)

- Refurbishment and operation of an existing currently not-in-use baghouse PM emission control device located on top of Carbon Storage Silo No. 16 to control emission from transfer of carbon product to Carbon Storage Silo No. 16 (previously part of EU No. 010), and from the loading of truck or railcars from Carbon Storage Silo Nos. 14 and 16 (EU No. 011). Emissions from these operations, and the transfer of carbon product to Carbon Storage Silo No. 14, were previously all controlled by PM emissions control Baghouse PJ-6. This meant that carbon product could not be transferred to Carbon Storage Silo Nos. 14 and 16 at the same time. With the modification, Baghouse PJ-6 will control only Carbon Storage Silo No. 14 (EU No. 010) and the refurbished baghouse will control Carbon Storage Silo No. 16 (new EU No. 014) (along with truck/railcar loading (EU No. 011)), thereby allowing both silos to be loaded at the same time.

(This modification affects EU Nos. 010 and 011, and will require creation of new EU No. 014.)

SECTION 1. GENERAL INFORMATION (DRAFT)

This project will modify (EU Nos. 001 thru 005, 007, and 009 thru 011), or create (EU Nos. 014, 015 and 016), the following emissions units (shown as modified/created):

EU ID No.	Emission Unit Description	Associated PM Emission Control Device
001	Dry Fly Ash Truck Receiving/ Unloading, and Bagged (Super Sacks) Activated Carbon Unloading	Baghouse PJ-T (Kinetic Air Model 100-SL-120)
002	Material Transfer to Fly Ash/Carbon Storage Silo Nos. 9 and 11	Baghouse PJ-1 (Kinetic Air Model 72-SL-120)
003	Material Transfer to Kiln Fly Ash Feed Hoppers K1 (for Kiln No. 1) and K2 (for Kiln No. 2) (currently not operating)	<i>none currently (however an emission control device is required if dry fly ash is transferred pneumatically)</i>
004	Kiln No. 2 (inner drying chamber)	SDC Model 48-SL-108
005	Kiln No. 1 (inner drying chamber)	SDC Model 48-SL-108
007	Kiln Surge Hopper, Shaker Screen, and Raymond Mill Receiving Hopper	Baghouse PJ-3 (Kinetic Air Model 12-RS-84)
009	Material Transfer to Carbon Storage Silo Nos. 8, 10 and 12	Baghouse PJ-2 (Kinetic Air Model 36-BV-84)
010	Material Transfer to Carbon Storage Silo No. 14	Baghouse PJ-6 (Kinetic Air Model 16-RS-84)
011	Bulk Truck/Railcar Loading	Flex-Kleen Model 84BVBS 1611G (common control device with EU 014)
014 (new)	Material Transfer to Carbon Storage Silo No. 16	Flex-Kleen Model 84BVBS 1611G (common control device with EU 011)
015 (new)	Kiln No. 1 Combustion Chamber	<i>none</i>
016 (new)	Kiln No. 2 Combustion Chamber	<i>none</i>

(Affected EU Note – Existing EU Nos. 006, 012 and 013 (see Existing Facility EU Table) are not affected by the modifications being authorized by this construction permit.)

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

SECTION 1. GENERAL INFORMATION (DRAFT)

Exempt Emission Units/Activities

The wet fly ash handling operations (*see description below*) are exempt from air permitting in accordance with the provisions of Rule 62-4.040(1)(b), F.A.C., based on insignificant potential particulate matter emissions from the handling of wet material.

Wet Fly Ash Handling

Fly ash can be received at approximately 66-80% moisture content (wet fly ash). This material is too wet to be handled by the normal (dry) fly ash handling system (*see EU Nos. 001, 002 and 003*) without causing pluggage and other operational problems. The wet fly ash is dumped directly on the pavement. Due to the high moisture content dusting is not a problem when wet fly ash is received. Precautions are taken to prevent dusting in case the pile surface dries and it becomes windy enough to potentially blow fly ash off the pile surface. The wet fly ash pile is covered with tarps and there is a water hose available to wet the surface of the pile if necessary. In order to directly load the wet fly ash to the kilns, the wet fly ash is loaded into a bin and taken by forklift to the kilns. The bin is elevated above either one of the kiln fly ash feed hoppers (EU No. 003), which has its lid removed. The wet fly ash is then dumped into the feed hopper from which it feeds into the kiln.

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 permit establishes the facility as a synthetic non-Title V source by requiring the use of air pollution control equipment (i.e., baghouse PM emission control devices) such that the facility's particulate matter (PM) emissions are less than the threshold limits required for the facility to be considered a major source per Chapter 62-213, F.A.C.

PERMIT HISTORY/AFFECTED PERMITS

This air construction permit (0830170-004-AC) modifies and replaces facility Construction Permit No. 0830170-003-AC.

**SECTION 2. ADMINISTRATIVE REQUIREMENTS AND FACILITY-WIDE SPECIFIC
CONDITIONS (DRAFT)**

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.]

**SECTION 2. ADMINISTRATIVE REQUIREMENTS AND FACILITY-WIDE SPECIFIC
CONDITIONS (DRAFT)**

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(s) 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(s). 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 the modified baghouse emission control devices (EU No. 009 w/ Baghouse PJ-2; and EU Nos. 011 and 014 w/ common Flex-Kleen Model 84BVBS 1611G baghouse). 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.;
 - c. copies of the most recent month of product loadout records specified in Specific Condition No. E.6.

[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.]

FACILITY-WIDE SPECIFIC CONDITIONS

9. General Pollutant Emission Limiting Standards: Unconfined Particulate Matter - No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. In addition to the measures specified in Rule 62-296.320(4)(c), F.A.C. (*see Item 9. In Section 4, Appendix C.*), fly ash piles shall be covered with tarps and a water hose shall be available and used to water piles if the surface dries.
[Rule 62-296.320(4)(c), F.A.C.]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

A. EU Nos. 001 thru 003, 007, and 009 thru 014 - Material Handling and Storage

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

EU ID No.	Emission Unit Description	Associated PM Emission Control Device
001	Dry Fly Ash Truck Receiving/Unloading, and Bagged (Super Sacks) Activated Carbon Unloading**	Baghouse PJ-T (Kinetic Air Model 100-SL-120, w/design airflow rate of 6,000 dscfm)
002	Material Transfer to Fly Ash/Carbon Storage Silo Nos. 9 and 11	Baghouse PJ-1 (Kinetic Air Model 72-SL-120, w/design airflow rate of 4,000 dscfm)
003	Dry Fly Ash Transfer to Kiln Fly Ash Feed Hoppers K1 (for Kiln No. 1) and K2 (for Kiln No. 2)	<i>None currently (However, an emission control device is required if dry fly ash is transferred pneumatically – see Specific Condition No. A.2.)</i>
007	Kiln Surge Hopper, Shaker Screen, and Raymond Mill	Baghouse PJ-3 (Kinetic Air Model 12-RS-84 , w/design airflow rate of 600 dscfm)
009	Material Transfer to Carbon Storage Silo Nos. 8, 10 and 12	Baghouse PJ-2 (Kinetic Air Model 36-BV-84) w/design airflow rate of 1,000 dscfm)
010	Material Transfer to Carbon Storage Silo No. 14	Baghouse PJ-6 (Kinetic Air Model 16-RS-84) w/design airflow rate of 800 dscfm)
011	Bulk Truck/Railcar Loading	Flex-Kleen Model 84BVBS 1611G w/design airflow rate of 600 dscfm (common control device with EU No. 014)
012	Material Transfer to Carbon Bagging Storage Tower	Flex-Kleen Model 84BVBS-25 w/design airflow rate of 600 dscfm
013	Material Transfer to Carbon Bagging Hopper, and to Bagging Unit	Mahle Model 25-K w/estimated design airflow rate of 600 dscfm
014	Material Transfer to Carbon Storage Silo No. 16	Flex-Kleen Model 84BVBS 1611G w/design airflow rate of 600 dscfm (common control device with EU No. 011)

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

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

A. EU Nos. 001 thru 003, 007, and 009 thru 014 - Material Handling and Storage

More Detailed Emission Unit Descriptions

EU No. 001 - Dry Fly Ash Truck Receiving/Unloading*, and Bagged (Super Sacks) Activated Carbon Unloading**

(*Optional operating alternative when dry fly ash is being received as the raw material for the facility**.)

Dry fly ash (less than 45% moisture content (the maximum moisture content the fly ash handling system was designed to handle)) is received via trucks and unloaded by dumping into four fly ash receiving hoppers, which are housed in a truck receiving building to control fugitive dust emissions.

Powdered activated carbon from off-site (activated carbon produced from fly ash from coal combustion to be used for blending with the activated carbon produced at this facility, which is from flyash from wood combustion) is also received in very large bags (super sacks) in this same building and dumped/unloaded into two of the receiving hoppers. From the receiving hoppers, the powdered activated carbon is pneumatically transferred to Flyash/Carbon Storage Silo Nos. 9 and 11 (EU No. 002) or to Carbon Storage Silo Nos. 8, 10 and 12 (EU No. 009).

Emissions from the fly ash /activated carbon unloading activities in this building are controlled by a baghouse dust control device (Baghouse PJ-T). The blower system associated with this baghouse will also maintain a slight negative pressure in the receiving building to enhance fugitive dust control. The building's receiving door (approx 12' x 20') is equipped with plastic sheets to contain fugitive dust emissions.

*** EU No. 001 Note - EU No. 001 is used for unloading and handling of dry (< 45% moisture content) fly ash. It is not used for fly ash handling when the facility is receiving and processing wet fly ash. Since the start of operation, the facility has received only wet fly ash and has not processed any dry fly ash. (See also Specific Conditions A.4. and A.6. related to initial operation of this emissions unit).*

EU No. 002 - Material Transfer to Dry Fly Ash*/Carbon** Storage Silo Nos. 9 and 11

(*Optional operating alternative when dry fly ash is being received as the raw material for the facility**.)

Blower systems pneumatically transfer dry fly ash or powdered activated carbon received from offsite to these two dry fly ash storage/carbon storage silos.

Particulate matter emissions from the material transfer to both storage silos (the two storage silos are interconnected at the top) are controlled by a common baghouse dust collector (Baghouse PJ-1).

*** EU No. 002 Note - Storage Silo Nos. 9 and 11 are used for storage of dry (< 45% moisture content) fly ash. They are not used for fly ash storage when the facility is receiving and processing wet fly ash. Since the start of operation, the facility has received only wet fly ash and has not processed any dry fly ash. (See also Specific Conditions A.4. and A.6. related to initial operation of this emissions unit.)*

When they are not being used to store dry fly ash (i.e., when the facility is processing wet fly ash), Silo Nos. 9 and 11 can be used to store powdered activated carbon from offsite used to blend with activated carbon produced at this facility. From these two silos, the carbon can be pneumatically transferred to Carbon Storage Silo Nos. 14 or 16 (EU Nos. 010 and 014), or to the Carbon Bagging Storage Tower (EU No. 012) (the same as carbon from Carbon Storage Silos Nos. 8, 10 and 12 (EU No. 009).)

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

A. EU Nos. 001 thru 003, 007, and 009 thru 014 - Material Handling and Storage

EU No. 003 - Material Transfer to Kiln Fly Ash Feed Hoppers K1 (Kiln No. 1) and K2 (Kiln No. 2)*

Dry fly ash from the fly ash storage silos can be transferred pneumatically to two (2) kiln fly ash feed hoppers (Feed Hopper K1 for Kiln No. 1, and Feed Hopper K2 for Kiln No. 2). The facility is currently not conducting this transfer operation as only wet flyash is being received*. There is not currently a baghouse emission control device installed for this pneumatic transfer operation*. (See also Specific Conditions A.2. related to restriction on operation of this emissions unit).

(* EU No. 003 Note - Wet fly ash (which is how all the fly ash raw material has been received since start of operation of the facility) is loaded to these feed hoppers by dumping wet fly ash directly into the hoppers. Wet fly ash is loaded into a bin and taken by forklift to the kilns. The bin is elevated above the either one of the kiln fly ash feed hoppers which has its lid removed, and dumped. This loading of the wet fly ash does not produce any emissions and no baghouse emission control device is necessary or required. However, an emission control device is required if dry fly ash is transferred pneumatically to the kiln fly ash feed hoppers – see Specific Condition No. A.2.)

EU No. 007 - Kiln Surge Hopper, Shaker Screen and Raymond Mill Receiving Hopper

Unmilled (unground) product (activated carbon) from the kilns is sent to the enclosed Kiln Surge Hopper shared by the two kilns via two (water cooled) cooling screw conveyors. (This surge hopper serves as an overflow reservoir for the kilns should the transfer of product to the Raymond Mill Receiving Hopper be interrupted, as the product must continue to be removed from the kilns even after the flow of feed is stopped. The surge hopper can hold about 1 ton of unground product, enough to clear the kiln if needed.) From this surge hopper the product is conveyed to a shaker screen to remove sand from the kiln product, and then pneumatically conveyed to the Raymond Mill Receiving Hopper. Fines from the kiln cyclone separator precleaners and other equipment are carried to a fines surge hopper and from there also conveyed to the Raymond Mill Receiving Hopper. Sand separated out in the shaker screen will pass through a rotary air lock into an enclosed bin, dropping by gravity. This bin will be changed out periodically. All of the equipment associated with the shaker screen (feeder equipment, shaker screen, and outlet equipment) is enclosed such that there are no direct air emissions from this operation. Particulate matter (PM) emissions from the Kiln Surge Hopper, Shaker Screen and the Raymond Mill Receiving Hopper are controlled by a common baghouse dust collector (Baghouse PJ-3).

EU No. 009 - Material Transfer to Carbon Storage Silo Nos. 8, 10 and 12

From the Raymond Mill Outlet Hopper the activated carbon (carbon) is pneumatically transferred to Carbon Storage Silo Nos. 8, 10 and 12. Activated carbon from Fly Ash/Carbon Storage Silo Nos. 9 and/or 11) (EU No. 002) can also be transferred to Carbon Storage Silo Nos. 8, 10 and 12. Particulate matter (PM) emissions from transfer of carbon to the Carbon Storage Silo Nos. 8, 10 and 12 (these three silos are interconnected at the top) are controlled by a common baghouse dust collector (Baghouse PJ-2).

EU No. 010 - Material Transfer to Carbon Storage Silo No. 14

Activated carbon product (carbon) for bulk truck/railcar loading is pneumatically transferred from Carbon Storage Silo Nos. 8, 10 or 12 to Carbon Storage Silo No. 14. Carbon Storage Silo No. 14 is located above the railroad tracks where trucks or railcars are loaded with finished carbon product for shipment (as is Carbon Storage Silo No. 16 (EU No. 014)). Particulate matter (PM) emissions from transfer of carbon to Carbon Storage Silo No. 14 are controlled by a baghouse dust collector (Baghouse PJ-6).

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

A. EU Nos. 001 thru 003, 007, and 009 thru 014 - Material Handling and Storage

EU No. 011 - Bulk Truck/Railcar Carbon Loading

Truck or railcars are loaded from Carbon Storage Silo Nos. 14 and 16 (EU Nos. 010 and 014) (located above the railroad tracks where trucks or railcars are loaded) by gravity through a Rotor Lock valve. Particulate matter (PM) emissions from truck/railcar loading are controlled by a Flex-Kleen baghouse dust collector, which also controls emissions from Carbon Storage Silo No. 16 (EU No. 014).

EU No. 012 - Material Transfer to Carbon Bagging Storage Tower

Activated carbon product (carbon) for bagging is transferred pneumatically from Carbon Storage Silo Nos. 8, 10 and 12 to the Carbon Bagging Storage Tower. Particulate matter (PM) emissions from the Carbon Bagging Storage Tower are controlled by a Flex-Kleen baghouse dust collector.

EU No. 013 - Material Transfer to Carbon Bagging Hopper and to Bagging Unit

From the Carbon Bagging Storage Tower, the activated carbon product (carbon) drops into the Carbon Bagging Hopper, and from this hopper drops into the Bagging Unit, which consists of a manual operation bagging machine. The Bagging Unit operates at a maximum design rate of 1.0 ton/hour. Particulate matter (PM) emissions from the Carbon Bagging Hopper and from the Bagging Unit are both controlled by a common Mahle baghouse dust collector.

EU No. 014 - Material Transfer to Carbon Storage Silo No. 16

Activated carbon product (carbon) for bulk truck/railcar loading is pneumatically transferred from Carbon Storage Silo Nos. 8, 10 or 12 to Carbon Storage Silo No. 16. Carbon Storage Silo No. 16 is located above the railroad tracks where trucks or railcars are loaded with finished carbon product for shipment (as is Carbon Storage Silo No 14 (EU No. 010)). Particulate matter (PM) emissions from transfer of carbon to Carbon Storage Silo No. 16 are controlled by a Flex-Kleen baghouse dust collector which also controls emissions from EU No. 011 (Bulk Truck/Railcar Carbon Loading).

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 units (EUs).

EMISSIONS STANDARDS

A.1. Visible Emissions (VE) Limitation For Material Storage Silos/Hoppers - In order to provide reasonable assurance that the material (fly ash and activated carbon product) handling and storage silo baghouses PM emission control devices are 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 each of these baghouse exhausts. This VE limit applies to all of the baghouses shown in the Emission Unit table above.

[Rules 62-4.070(3), and 62-210.650, F.A.C.; Construction Permit 0830170-003-AC]

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

A. EU Nos. 001 thru 003, 007, and 009 thru 014 - Material Handling and Storage

OPERATION RESTRICTIONS

A.2. Prohibition on Dry Fly Ash Transfer to Kiln Fly Ash Feed Hoppers K1 and K2 (EU No. 003) - Transfer of dry fly ash to Kiln Fly Ash Hoppers K1 and K2 is not permitted and shall not be conducted until such time as baghouse dust collector emission control equipment is installed to control emissions from Kiln Fly Ash Hoppers K1 and K 2. In accordance with Rule 62-210.300(1)(a). F.A.C., installation of any new pollution control equipment requires an air construction permit prior to the installation of the control equipment.
[Rules 62-4.070(3), 62-210.300(1)(a), and 62-210.650, F.A.C.]

COMPLIANCE TESTING REQUIREMENTS

A.3. Annual Visible Emissions (VE) Compliance Tests - During each federal fiscal year (October 1st to September 30th), the exhaust vents for the baghouse PM emission control devices listed below shall be tested to demonstrate compliance with the visible emissions (VE) standards of Specific Condition No. A.1. The processes/activities required to be in operation during the testing periods are also shown below. Testing of emissions from material transfer operations shall be conducted during material transfer/silo loading conditions that are representative of normal transfer operations¹.

EU ID No(s).	Baghouse ID/ Description	Operation(s) to be conducted during emissions testing
001	PJ-T	Dry fly ash truck unloading; or bagged activated carbon unloading
002	PJ-1	Transfer of dry fly ash, or activated carbon, to Fly Ash/Carbon Storage Silos 9 or 11 ²
007	PJ-3	Transfer of material to Kiln Surge Hopper, and Raymond Mill Receiving Hopper, with Shaker Screen also operating.
009	PJ-2	Transfer of activated carbon from Raymond Mill to Carbon Storage Silos 8, 10 or 12 ²
010	PJ-6	Transfer of carbon to Carbon Storage Silo 14
011 & 014	Flex-Kleen Model 84BVBS 1611G	Loading of carbon product into trucks* or railcars* (EU No. 011) and Transfer of carbon to Carbon Storage Silo 16 (EU No. 014) (both EUs have common baghouse)
012	Flex-Kleen Model 84BVBS-25	Transfer of carbon product to Carbon Bagging Storage Tower
013	Mahle Model 25-K	Transfer of carbon to the Carbon Bagging Hopper and operation of Bagging Unit (bagging machine)

* Compliance testing is not required for this mode if this mode of shipping of final product (i.e., by truck or by railcar) has not been used during the current federal fiscal year.

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

A. EU Nos. 001 thru 003, 007, and 009 thru 014 - Material Handling and Storage

A.3. (continued)

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 - The baghouses for these EUs control emissions from multiple silos. It does not matter which of the multiple silo/hopper(s) controlled by the baghouse the material is being transferred to as the transfer rate will be the same.

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

A.4. Initial Visible Emissions (VE) Compliance Tests for Dry Fly Ash and Bagged Activated Carbon Unloading and Handling Operations (EU Nos. 001 and 002 with Baghouses PJ-T and PJ-1)* - Within 45 days of their initial operation, the permittee shall conduct initial visible emissions (VE) compliance tests on the baghouse control devices for the dry fly ash and bagged powdered activated carbon unloading and handling operations (i.e., EU No. 001 with emission control device Baghouse PJ-T and EU No. 002 with emission control device Baghouse PJ-1), to demonstrate compliance with the VE standards of Specific Condition No. A.1. The processes/activities required to be in operation during the testing periods are as shown in Specific Condition No. A.3.

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

(Permitting Note - See also Specific Condition No. A.6. for notification requirements associated with the first use of the dry fly ash unloading and handling equipment.)

(EU No. 003 Dry Fly Ash Handling Note - Transfer of dry fly ash to Kiln Fly Ash Feed Hoppers K1 and K2 (EU No. 003) is not currently permitted or allowed - see Specific Condition No. A.2.)*

A.5. Process Operation Information to be Submitted with Compliance Test Reports - The compliance test reports (also see Section 4 Appendix D., Condition 5 (Test Reports)) shall provide the following process operation information (where applicable) from the test period:

A. All test reports shall include a statement of the material transfer operations (as further described below) that were being done during the test period and a statement of whether they represented normal operating conditions.

B. For Dry Fly Ash Truck and Bagged Activated Carbon Unloading and Transfer to Fly Ash/Carbon Storage Silo Nos. 9 and 10 (EU Nos. 001 and 002 w/Baghouses PJ-T and PJ-1), the test report shall include a statement of the number of trucks unloaded during the test period and the weight of fly ash unloaded from each truck (tons), and a statement of what fly ash silo loading operations were being conducted. If Fly Ash/Carbon Storage Silos Nos. 9 and 11 are being used to store carbon, then the test report shall include a statement of what carbon storage silo loading operations were being conducted.

C. For the Kiln Surge Hopper and Raymond Mill Receiving Hopper (EU No. 007 w/Baghouse PJ-3), the test report shall include a statement of what carbon transfer operations to the Kiln Surge Hopper and Raymond Mill Receiving Hopper were being conducted.

(continued)

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

A. EU Nos. 001 thru 003, 007, and 009 thru 014 - Material Handling and Storage

A.5. (continued)

- D. For Transfer of Carbon From Raymond Mill Outlet Hopper to Carbon Storage Silos 8, 10 and 12 (EU No. 009 w/ Baghouses PJ-2), the test report shall include a statement of what carbon storage silo loading operations were being conducted.
- E. For Transfer to Carbon Storage Silo No. 14 (EU No. 010 w/ Baghouse PJ-6), as required in A. above, the test report shall also include a statement as to whether activated carbon was being transferred to Carbon Storage Silo 14 (*see EU No. 010 operation during testing requirements in Specific Condition No. A.3.*).
- F. For Transfer to Carbon Storage Silo No. 16, and Truck/Railcar Loading (EU Nos. 014 and 011 w/common Flex-Kleen baghouse), the test report shall include a statement of the estimated truck or railcar activated carbon loading rate (tons/hr) during the test period. As required in A. above, the test report shall also include a statement as to whether activated carbon was being transferred to Carbon Storage Silo No. 16 during the test period (*see EU Nos. 011 and 014 operation during testing requirements in Specific Condition No. A.3.*). If testing is not done during both truck and railcar loading (separate tests), then the test report shall include a statement of why that mode of product loading/shipping was not tested and when it is anticipated that this mode of loading shipping will be first used or used next.
- G. For the Carbon Bagging Storage Tower (EU No. 012 w/Flex Kleen baghouse), the test report shall include a statement as to whether activated carbon was being transferred to the Carbon Bagging Storage Tower during the test period.
- H. For the Carbon Bagging Hopper and Bagging Unit (EU 013 w/Mahle baghouse), the test report shall include the estimated bagging rate (tons/hour) during the test period. The test report shall also include a statement as to whether activated carbon was being transferred to the Carbon Bagging Hopper during the test period (*see EU No. 013 operation during testing requirement in Specific Condition No. A.3.*).

[Rules 62-4.070(3) and 62-297.310(8), F.A.C.; Construction Permit 0830170-003-AC]

NOTIFICATION REQUIREMENTS

- A.6. Notification of Start of Dry Fly Ash or Bagged Activated Carbon Unloading Operations - The permittee shall notify the Compliance Authority of the date of the first processing of dry fly ash, and the date of the first processing of bagged powdered activated carbon, using the dry fly ash and bagged activated carbon unloading and handling equipment (EU Nos. 001 and 002). The written notifications shall be sent within 15 days of the first such dry fly ash or bagged activated carbon processing.

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

(Permitting Note - See also Specific Condition No. A.3. for initial VE testing requirements for this equipment/process.)

Recordkeeping Note - See also Specific Condition No. E.6. (Section 3, Subsection E. Common Conditions) for product loadout recordkeeping requirements associated with Bulk Truck/Railcar Loadout (EU No. 011) and the Bagging Unit (EU No. 013).

SECTION 3. FACILITY-WIDE AND EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

B. EU Nos. 004 and 005 - Kiln No. 2 and Kiln No. 1 (Drying Chambers)

This section of the document addresses the following emissions units (EUs) (and associated PM emission control devices). (See more detailed description below the emission unit table.)

EU ID No.	Emission Unit Description	Associated PM Emission Control Device
004	Kiln No. 2 (inner drying chamber)	SDC Model 48-SL-108 (w/ design airflow rate of 2,500 dscfm)
005	Kiln No. 1 (inner drying chamber)	SDC Model 48-SL-108 (w/ design airflow rate of 2,500 dscfm)

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

Kiln Nos. 1 and 2 (EU Nos. 005 and 004)

Fly ash from the kiln fly ash hoppers is gravity fed into two (2) kilns (Kiln Nos. 1 and 2) for conversion into activated carbon. The kilns each have a separate combustion chamber (see EU Nos. 015 and 016 in Subsection D.) such that the kiln itself is heated indirectly and the combustion gases do not come into direct contact with the fly ash being processed. Exhaust gases from each of the kilns pass through a heat exchanger prior to the emission control devices. Particulate matter (PM) emissions from each kiln are controlled by a cyclone separator precleaner, followed by a baghouse dust collector. The total estimated activated carbon production rate from each kiln is approximately 1.0 ton/hour*.

(Kiln Process Feed/Production Rate Note – For wet fly ash of approximately 75% moisture it takes about 4 tons/hour of wet fly ash to produce 1 ton/hour of activated carbon from the kiln. When (dry) fly ash of approximately 25% moisture is processed, the ash feed rate would be about 1.3 tons/hour to produce 1.0 ton/hour of activated carbon.)

The following Specific Conditions apply to the above emission units (EUs).

EMISSIONS STANDARDS

(Particulate Matter (PM) Emission Limit Note - Rule 62-296.320(4)(a), F.A.C. (General Particulate Emission Limiting Standards - Process Weight Table) applies to several operations at this facility including Kiln No. 1 (EU No. 005) and Kiln No. 2 (EU No. 004), which “process raw materials to produce a finished product through a chemical or physical change”. In order to limit the potential to emit particulate matter (PM) from these operations, the applicant has requested that more stringent PM emission limitations be established for these emission units than those that would be applicable from the Process Weight Table equation at higher process rates (see Specific Condition No. B.1. a.)

B.1. Maximum Allowable Particulate Matter Emissions from Kiln Nos. 1 and 2 (EU Nos. 005 and 004) - Particulate matter (PM) emissions from Kiln No. 1 (EU No. 005) and Kiln No. 2 (EU 004) shall each not exceed the lower limit (i.e., more stringent*) of the following:

- a. 2.5 pounds/hour;
- (continued)

SECTION 3. FACILITY-WIDE AND EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

B. EU Nos. 004 and 005 - Kiln No. 2 and Kiln No. 1 (Drying Chambers)

B.1. (continued)

- b. the maximum emission rate allowed by the following Process Weight Table equation contained in Rule 62-296.320(4(a)(2), F.A.C. (General Particulate Emission Limiting Standards - Process Weight Table):

$$\text{Maximum Allowable Emission Rate (pounds/hour)} = 3.59 \times P^{0.62}$$

Where P = process (input) rate in tons/hour (TPH)

(* **Process Weight Table Based Limit Note** - At a kiln process (input) rate equal to and greater than 0.56 tons/hour, the 2.5 pounds/hour emission limit is more stringent (i.e., lower) than the process Weight Table equation limit. At a process rate less than 0.56 TPH, the above Process Weight Table equation limit will be more stringent.)

(Permitting Note - See Specific Condition No. B.2. for alternate visible emissions (VE) limitations associated with showing compliance with the above PM emission limitations.)

[Rules 62-210.200 (Definition of Potential to Emit), and 62-296.320(4(a)(2), F.A.C., as requested by the applicant; Construction Permit 0830170-003-AC]

- B.2.** Alternate Visible Emissions (VE) Limitations in Lieu of PM Testing - Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because a baghouse is used as the emission control devices, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a visible emission (VE) limitation not to exceed an opacity of five percent (5%) from the applicable exhaust stack in lieu of a particulate stack test to show compliance with the particulate matter emission limits of Specific Condition No. B.1. The applicable exhaust stacks are the Kiln No. 1 (EU No. 005) and Kiln No. 2 (EU No. 004) baghouses (both SDC Model 48-SL-108) exhaust vents. Should the Department have reason to believe the particulate emission standard is not being met, the Department shall require that compliance with the particulate emission standard be demonstrated by the applicable test method specified in the applicable rule (*see Section 4. Appendix D, Item 4.b. (Special Compliance Tests)*).
[Rules 62-4.070(3), and 62-297.620(4), F.A.C.; Construction Permit 0830170-003-AC]

SECTION 3. FACILITY-WIDE AND EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

B. EU Nos. 004 and 005 - Kiln No. 2 and Kiln No. 1 (Drying Chambers)

TESTING REQUIREMENTS

B.3. Annual Visible Emissions (VE) Compliance Tests - During each federal fiscal year (October 1st to September 30th), the exhaust vents for the baghouse particulate matter (PM) emission control devices listed below shall be tested to demonstrate compliance with the visible emissions (VE) standards of Specific Condition No. B.2. The processes/activities required to be in operation during the testing periods are also shown below.

EU ID No.	Baghouse Description	Operation(s) to be conducted during emissions testing
004	SDC Model 48-SL-108	Material being processed thru <u>Kiln No. 2</u> inner drying chamber
005	SDC Model 48-SL-108	Material being processed thru <u>Kiln No. 1</u> inner drying chamber

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

B.4. Process Operation Information to be Submitted with Compliance Test Reports - The compliance test reports (*also see Section 4, Appendix D., Item 5 (Test Reports)*) shall include the estimated kiln fly ash process input rate (tons/hour) during the test period for the kiln being tested.

[Rules 62-4.070(3) and 62-297.310(8), F.A.C.; Construction Permit 0830170-003-AC]

SECTION 3. FACILITY-LEVEL AND EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

C. EU No. 006 - Raymond Mill and Raymond Mill Outlet Hopper

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

EU ID No.	Emission Unit Description	Associated PM Emission Control Device
006	Raymond Mill and Raymond Mill Outlet Hopper	Mikro-Pulsaire Model 64S820 (w/ design airflow rate of 3,600 dscfm)

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

Raymond Mill and Raymond Mill Outlet Hopper (EU No. 006)

From the Raymond Mill Receiving Hopper (part of EU No. 007) the unground product is fed to the Raymond Mill, a Model 5057 Raymond Mill that has rollers in it that grind (mill) the product into a smaller size. The mill includes a blower which supplies air to lift the ground carbon up through an internal whizzer which is part of the mill. The whizzer spins like a bicycle wheel with spokes, and the finely ground carbon passes through the whizzer while larger particles are knocked down. The fine activated carbon material discharges to the Raymond Mill Outlet Hopper as product. The Raymond Mill operates at a maximum material input rate of up to 4.0 tons/hour. Particulate matter (PM) emissions from the Raymond Mill and Raymond Mill Outlet Hopper are controlled by a common baghouse dust collector.

The following Specific Conditions apply to the above emission units (EUs).

EMISSIONS STANDARDS

(Particulate Matter (PM) Emission Limit Note - Rule 62-296.320(4)(a), F.A.C. (General Particulate Emission Limiting Standards - Process Weight Table) applies to several operations at this facility, including the Raymond Mill (part of EU No. 006)), which "process raw materials to produce a finished product through a chemical or physical change". In order to limit the potential to emit particulate matter (PM) from these operations, the applicant has requested that more stringent PM emission limitations be established for these emission units than those that would be applicable from the Process Weight Table equation at higher process rates (see Specific Condition Nos. C.1. a.)

C.1. Maximum Allowable Particulate Matter Emissions from the Raymond Mill and Raymond Mill Outlet Hopper (EU No. 006) - Particulate matter (PM) emissions from the baghouse PM emissions control device for the Raymond Mill and Raymond Mill Outlet Hopper shall not exceed the lower limit (i.e., more stringent*) of the following:

- a. 5.0 pounds/hour; and

(continued)

SECTION 3. FACILITY-WIDE AND EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

C. EU No. 006 - Raymond Mill and Raymond Mill Outlet Hopper

C.1. (continued)

- b. the maximum emission rate allowed by the following Process Weight Table equation contained in Rule 62-296.320(4(a)(2), F.A.C. (General Particulate Emission Limiting Standards - Process Weight Table):

$$\text{Maximum Allowable Emission Rate (pounds/hour)} = 3.59 \times P^{0.62}$$

Where P = process (input) rate in tons/hour (TPH)

(***Process Weight Table Based Limit Note** - At process (input) rates above 1.7 tons/hour the 5.0 pounds/hour emission limit is more stringent (i.e., lower). At a process rate equal to or less than 1.7 TPH, the above Process Weight Table equation limit will be more stringent.)

(Permitting Note - See Specific Condition No. C.2. for alternate visible emissions (VE) limitations associated with showing compliance with the above PM emission limitations.)

[Rules 62-210.200 (Definition of Potential to Emit), and 62-296.320(4(a)(2), F.A.C., as requested by the applicant; Construction Permit 0830170-003-AC]

- C.2. Alternate Visible Emissions (VE) Limitations in Lieu of PM Testing for the Raymond Mill and Raymond Mill Outlet Hopper (EU No. 006) - Due to the expense and complexity of conducting a stack test on a minor source of particulate matter, and because a baghouse is used as the emission control devices, the Department, pursuant to the authority granted under Rule 62-297.620(4), F.A.C., hereby establishes a visible emission (VE) limitation not to exceed an opacity of five percent (5%) from the applicable exhaust stack in lieu of a particulate stack test to show compliance with the particulate matter emission limits of Specific Condition Nos. A.1. and A.2. The applicable exhaust stacks are the Mikro-Pulsaire Model 64S820 baghouse exhaust vent for the Raymond Mill and Raymond Mill Outlet Hopper (EU 006). Should the Department have reason to believe the particulate emission standard is not being met, the Department shall require that compliance with the particulate emission standard be demonstrated by the applicable test method specified in the applicable rule (*see Section 4. Appendix D, Item 4.b. (Special Compliance Tests)*).
[Rules 62-4.070(3), and 62-297.620(4), F.A.C.; Construction Permit 0830170-003-AC]

TESTING REQUIREMENTS

- C.3. Annual Visible Emissions (VE) Compliance Tests - During each federal fiscal year (October 1st to September 30th), the exhaust vent for the baghouse particulate matter (PM) emission control device listed below shall be tested to demonstrate compliance with the visible emissions (VE) standards of Specific Condition No. C.2. The processes/activities required to be in operation during the testing periods are also 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.

(continued)

SECTION 3. FACILITY-WIDE AND EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

C. EU No. 006 - Raymond Mill and Raymond Mill Outlet Hopper

C.3. (continued)

EU ID No.	Baghouse Description	Operation(s) to be conducted during emissions testing
006	Mikro-Pulsaire Model 64S820	Simultaneous operation of the Raymond Mill and material transfer to the Raymond Mill Outlet Hopper (<i>emissions from both are controlled by this common baghouse control device</i>)

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

C.4. Process Operation Information to be Submitted with Compliance Test Report - The compliance test report (*see Section 4, Appendix D., Condition 5 (Test Reports)*) shall provide the following process operation information from the test period:

- A. a statement of the material transfer operations that were being conducted during the test period and a statement of whether they represented normal operating conditions; and
- B. the estimated carbon process input rates to the Raymond Mill (tons/hour) during the test period.

[Rules 62-4.070(3) and 62-297.310(8), F.A.C.; Construction Permit 0830170-003-AC]

SECTION 3. FACILITY-WIDE AND EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

D. EU Nos. 015 and 016 - Kiln Nos. 1 and 2 Combustion Chambers

This section of the document addresses the following emissions units (EUs). (See more detailed description below the emission unit table.)

EU ID No.	Emission Unit Description
015	Kiln No. 1 Combustion Chamber
016	Kiln No. 2 Combustion Chamber

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

Kiln No. 1 Combustion Chamber (EU No. 015)

The Kiln No. 1 drying chamber is heated indirectly by a separate combustion chamber around the inner drying chamber. This combustion chamber has a series of natural gas fired burners with a total maximum design heat input rating of 19 MMBtu/hour. The products of combustion airflow from the combustion chamber is exhausted through a separate exhaust stack from the kiln drying chamber. There is no emission control device on this kiln combustion chamber exhaust.

Kiln No. 2 Combustion Chamber (EU No. 016)

The Kiln No. 2 drying chamber is heated indirectly by a separate combustion chamber around the inner drying chamber. This combustion chamber has a series of natural gas fired burners with a total maximum design heat input rating of 11.8 MMBtu/hour. The products of combustion airflow from the combustion chamber is exhausted through a separate exhaust stack from the kiln drying chamber. There is no emission control device on this kiln combustion chamber exhaust.

PERFORMANCE RESTRICTIONS

- D.1.** Authorized Fuel - The kilns are each permitted to burn natural gas only.
[Permit Application dated 06/19/11; Rule 62-210.200 (Definition of Potential to Emit), F.A.C.]
- D.2.** Permitted Hours of Operation - The kiln combustion chambers are each permitted to operate continuously (i.e., for 8760 hours/year).
[Rule 62-210.200 (Definition of Potential to Emit), F.A.C.]

(Maximum Heat Input Rate and Potential Emissions Permitting Note - The maximum kiln combustion chamber heat input rate values in the descriptions above represent the total combined maximum design (potential) heat input rate for all the burners on each kiln combustion chamber as provided by the equipment manufacturer. Worst case potential emissions from each kiln combustion chamber were calculated based on operation at these maximum design heat input rates for 8760 hours/year. This resulted in potential NOx (the pollutant with the highest emission rate) emissions of 18 tons/year from both kiln combustion chambers combined.)

SECTION 3. FACILITY-...IDE AND EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

E. Common Specific Conditions for EU Nos. 001, 002, 004 thru 014 (EUs in Subsections A., B. and C.)

This section of the document addresses specific conditions common to Emission Unit (EU) Nos. 001, 002 and 004 thru 014 (i.e., all of the EUs in Subsections A., B. and C. except EU No. 003).

PERFORMANCE RESTRICTIONS

- E.1. Permitted Hours of Operation - All of these emission units are permitted to operate continuously (i.e., for 8760 hours/year).
[Rule 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 0830170-003-AC]

- E.2. Maximum Permitted Activated Carbon Production Rate - The production of activated carbon product from this facility shall not exceed 15,000 tons in any 12 consecutive month period. For the purpose of demonstrating compliance with this limitation, production shall be defined as the total activated carbon shipped from the facility by truck and railcar (EU No. 011); plus any activated carbon bagged in the Bagging Unit (EU No. 013). (*Note - See Specific Condition No. E.6. for associated recordkeeping requirements.*)
[Rule 62-210.200 (Definition of Potential to Emit), F.A.C.; Construction Permit 0830170-003-AC]

COMPLIANCE TESTING REQUIREMENTS

- E.3. 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.]

- E.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]

SECTION 3. FACILITY-WIDE AND EMISSIONS UNIT SPECIFIC CONDITIONS (FINAL)

E. Common Specific Conditions for EU Nos. 001, 002, 004 thru 014 (EUs in Subsections A., B. and C.)

NOTIFICATION REQUIREMENTS

- E.5. 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.]

RECORDKEEPING REQUIREMENTS

- E.6. Activated Carbon Production Records - In order to demonstrate compliance the limits of Specific Condition No. E.2., the permittee shall maintain monthly activated carbon loadout records. At a minimum, the production records shall include the following for each calendar month:

- A. the quantity of activated carbon product loaded out to trucks (tons) (EU No. 011);
- B. the quantity of activated carbon loaded out to railcars (tons) (EU No. 011);
- C. the quantity of activated carbon bagged in the Bagging Unit (tons) (EU No. 013);
- D. the total monthly production (the sum of A., B., and C. above) (tons/month); and
- E. the total production for the most recent consecutive 12-month period (the sum of the monthly totals in D. above for the most recent 12 consecutive months) (tons/12 consecutive months).

The above monthly records shall be completed within 15 days of the end of each month.

[Rule 62-4.070(3), F.A.C.; Construction Permit 0830170-003-AC]

- E.7. Record Retention - The records required in this permit shall be maintained at the facility for a minimum of three years, and made available to the Department upon request.

[Rule 62-4.070(3), F.A.C.; Construction Permit 0830170-003-AC]

SECTION 4. APPENDICES

Contents

Appendix A. Citation Formats and Glossary of Common Terms

Appendix B. General Conditions

Appendix C. Common Conditions

Appendix D. Common Testing Requirements

SECTION 4. APPENDIX A

Citation Formats and Glossary of Common Terms

CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: “AC” identifies the permit as an Air Construction Permit
“AO” identifies the permit as an Air Operation Permit
“123456” identifies the specific permit project number

New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: “099” represents the specific county ID number in which the project is located
“2222” represents the specific facility ID number for that county
“001” identifies the specific permit project number
“AC” identifies the permit as an air construction permit
“AF” identifies the permit as a minor source federally enforceable state operation permit
“AO” identifies the permit as a minor source air operation permit
“AV” identifies the permit as a major Title V air operation permit

PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: “PSD” means issued pursuant to the preconstruction review requirements of the Prevention of Significant Deterioration of Air Quality
“FL” means that the permit was issued by the State of Florida
“317” identifies the specific permit project number

Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

Example: [40 CFR 60.7]

Means: Title 40, Part 60, Section 7

GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

AAQS: Ambient Air Quality Standard

acf: actual cubic feet

acfm: actual cubic feet per minute

ARMS: Air Resource Management System (DEP database)

BACT: best available control technology

bhp: brake horsepower

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

SECTION 4. APPENDIX A

Citation Formats and Glossary of Common Terms

CFR: Code of Federal Regulations	NESHAP: National Emissions Standards for Hazardous Air Pollutants
CAA: Clean Air Act	NO_x: nitrogen oxides
CMS: continuous monitoring system	NSPS: New Source Performance Standards
CO: carbon monoxide	O&M: operation and maintenance
CO₂: carbon dioxide	O₂: oxygen
COMS: continuous opacity monitoring system	Pb: lead
DARM: Division of Air Resource Management	PM: particulate matter
DEP: Department of Environmental Protection	PM₁₀: particulate matter with a mean aerodynamic diameter of 10 microns or less
Department: Department of Environmental Protection	ppm: parts per million
dscf: dry standard cubic feet	ppmv: parts per million by volume
dscfm: dry standard cubic feet per minute	ppmvd: parts per million by volume, dry basis
EPA: Environmental Protection Agency	QA: quality assurance
ESP: electrostatic precipitator (control system for reducing particulate matter)	QC: quality control
EU: emissions unit	PSD: prevention of significant deterioration
F.A.C.: Florida Administrative Code	psi: pounds per square inch
F.A.W.: Florida Administrative Weekly	PTE: potential to emit
F.D.: forced draft	RACT: reasonably available control technology
F.S.: Florida Statutes	RATA: relative accuracy test audit
FGD: flue gas desulfurization	RBLC: EPA's RACT/BACT/LAER Clearinghouse
FGR: flue gas recirculation	SAM: sulfuric acid mist
Fl: fluoride	scf: standard cubic feet
ft²: square feet	scfm: standard cubic feet per minute
ft³: cubic feet	SIC: standard industrial classification code
gpm: gallons per minute	SIP: State Implementation Plan
gr: grains	SNCR: selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)
HAP: hazardous air pollutant	SO₂: sulfur dioxide
Hg: mercury	TPD: tons/day
I.D.: induced draft	TPH: tons per hour
ID: identification	TPY: tons per year
kPa: kilopascals	TRS: total reduced sulfur
lb: pound	UTM: Universal Transverse Mercator coordinate system
MACT: maximum achievable technology	VE: visible emissions
MMBtu: million British thermal units	VOC: volatile organic compounds
MSDS: material safety data sheets	
MW: megawatt	

SECTION 4. APPENDIX B

General Conditions

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
 - a. Have access to and copy any records that must be kept under conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of noncompliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

SECTION 4. APPENDIX B

General Conditions

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - a. Determination of Best Available Control Technology (not applicable);
 - b. Determination of Prevention of Significant Deterioration (not applicable); and
 - c. Compliance with New Source Performance Standards (not applicable).
14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c. Records of monitoring information shall include:
 - (a) The date, exact place, and time of sampling or measurements;
 - (b) The person responsible for performing the sampling or measurements;
 - (c) The dates analyses were performed;
 - (d) The person responsible for performing the analyses;
 - (e) The analytical techniques or methods used;
 - (f) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SECTION 4. APPENDIX C

Common Conditions

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
2. Circumvention of Control Equipment: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. Pursuant to Rule 62-210.700(5), F.A.C., the permit subsection may specify more or less stringent requirements for periods of excess emissions. Rule 62-210-700(Excess Emissions), F.A.C., cannot vary or supersede any federal NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C.]
4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
6. VOC or OS Emissions: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.]
8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]
9. Unconfined Particulate Emissions:
 - a. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter from any activity, including vehicular movement; transportation of materials; construction, alteration, demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions.
 - b. Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter.
 - c. Reasonable precautions include the following:
 - (1) Paving and maintenance of roads, parking areas and yards.
 - (2) Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.

SECTION 4. APPENDIX C

Common Conditions

- (3) Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities.
- (4) Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent reentrainment, and from buildings or work areas to prevent particulate from becoming airborne.
- (5) Landscaping or planting of vegetation.
- (6) Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
- (7) Confining abrasive blasting where possible.
- (8) Enclosure or covering of conveyor systems.

[Rule 62-296.320(4)(c), F.A.C.]

RECORDS AND REPORTS

10. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 3 years following the date on which such measurements, records, or data are recorded, unless otherwise specified by Department rule. Records shall be made available to the Department upon request. [Rule 62-4.160, F.A.C.]
11. Emissions Computation and Reporting:
 - a. *Applicability*. This rule sets forth required methodologies to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with this rule. This rule is not intended to establish methodologies for determining compliance with the emission limitations of any air permit. [Rule 62-210.370(1), F.A.C.]
 - b. *Computation of Emissions*. For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.
 - (1) *Basic Approach*. The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
 - (a) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.
 - (b) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
 - (c) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
 - (2) *Continuous Emissions Monitoring System (CEMS)*.
 - (a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:

SECTION 4. APPENDIX C

Common Conditions

- 1) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or
 - 2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
- (b) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:
- 1) A calibrated flow meter that records data on a continuous basis, if available; or
 - 2) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
- (c) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.
- (3) Mass Balance Calculations.
- (a) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
- 1) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and
 - 2) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.
- (b) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.
- (c) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.
- (4) Emission Factors.
- a. An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.
- 1) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
 - 2) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.

SECTION 4. APPENDIX C

Common Conditions

- 3) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
 - b. If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.
- (5) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
- (6) Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.
- (7) Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.
- (8) Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

[Rule 62-210.370(2), F.A.C.]

c. *Annual Operating Report for Air Pollutant Emitting Facility*

- (1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:
 - a. All Title V sources.
 - b. All synthetic non-Title V sources.
 - c. All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.
 - d. All facilities for which an annual operating report is required by rule or permit.
- (2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.
- (3) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office.
- (4) Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.
- (5) Facility Relocation. Unless otherwise provided by rule or more stringent permit condition, the owner or operator of a relocatable facility must submit a Facility Relocation Notification Form (DEP Form No. 62-210.900(6)) to the Department at least 30 days prior to the relocation. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated.

[Rule 62-210.370(3), F.A.C.]

SECTION 4. APPENDIX D
Common Testing Requirements

Unless otherwise specified in the permit, the following testing requirements apply to all emissions units at the facility.

COMPLIANCE TESTING REQUIREMENTS

1. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]
2. Applicable Test Procedures - Opacity Compliance Tests: When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

[Rule 62-297.310(4), F.A.C.]

3. Determination of Process Variables:
 - a. *Required Equipment*. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
 - b. *Accuracy of Equipment*. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

4. Frequency of Compliance Tests: The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.
 - a. *General Compliance Testing*.
 1. The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.
 2. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air

SECTION 4. APPENDIX D
Common Testing Requirements

operation permit pursuant to sub-subparagraph 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

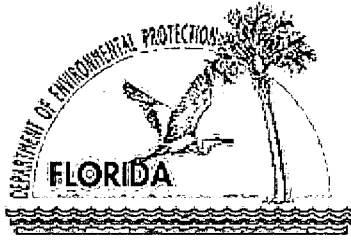
- (a) Did not operate; or
 - (b) In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours,
3. During each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for visible emissions, if there is an applicable standard.
 4. The owner or operator shall notify the Department, 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 test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- b. *Special Compliance Tests.* When the Department, 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 a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

[Rule 62-297.310(7), F.A.C.]

RECORDS AND REPORTS

5. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report shall provide the following information.
 - a. The type, location, and designation of the emissions unit tested.
 - b. The facility at which the emissions unit is located.
 - c. The owner or operator of the emissions unit.
 - d. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - e. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - f. The date, starting time and end time of the observation.
 - g. The test procedures used.
 - h. The names of individuals who furnished the process variable data, conducted the test, and prepared the report.
 - i. The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit plus the test result in the same form and unit of measure.
 - j. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]



**TECHNICAL EVALUATION
&
PRELIMINARY DETERMINATION**

APPLICANT

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

Facility ID No. 0830170

PROJECT

Project No. 0830170-004-AC
Application for Minor Air Construction Permit for Facility Modifications

COUNTY

Marion County Florida

PERMITTING AUTHORITY

Florida Department of Environmental Protection
Air Resource Management
Southwest District Office
Temple Terrace, Florida 33637-7600

July 19, 2011

Prepared by David Zell

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

GENERAL PROJECT INFORMATION

Air Pollution Regulations

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

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

Glossary of Common Terms

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

I. Project Description:

A. Applicant:

Mr. James Sharpe, CEO
Standard Carbon LLC
551 North U.S. Highway 41
Dunnellon, FL 34432

B. Professional Engineer:

Mr. Kenneth E. Given, P.E.
Air Testing & Consulting, Inc.
333 N. Falkenburg Road, Unit B-214
Tampa, FL 33619

C. Project Location:

This existing activated carbon production facility is located at 551 North Highway 41 in Dunnellon, Marion County

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

D. Project Summary:

The construction permit application (with clarifications made in subsequent discussions with the plant manager during a 07/12/11 site visit) requested authorization to make the following modifications.

- Increase maximum permitted kiln combustion chamber fuel heat input rates from 8 MMBtu/hr to 19 MMBtu/hr (21 burners @0.905 MMBtu/hr each) for Kiln No. 1, and from 8 MMBtu/hr to 11.8 MMBtu/hr (13 burners @0.905 MMBtu/hr each) for Kiln No. 2, through combustion chamber blower modifications.

(PTE Note - This modification will result in an increase of potential emissions from combustion of natural gas in both of the kiln combustion chambers. The increases will take the NOx PTE for each of the kiln combustion chambers from below 5 TPY (and therefore exempt from permitting) to above 5 TPY (thereby making them emission sources subject to permitting and requiring assignment of new emission unit ID numbers.)*

(This will require creation of new EU Nos. 015 (Kiln No. 1 Combustion Chamber) and 016 (Kiln No. 2 Combustion Chamber).) (* Note - These kiln combustion chambers were previously considered exempt from air permitting under Rules 62-210.300(3)(a)(34)(Categorical and Conditional exemption for external combustion heating units) and 62-210.300(3)(b)1.(Generic Emission Activity Exemption), F.A.C.)*

- Replace existing Carbon Storage Silo Nos. 8, 10 and 12 emission control Baghouse PJ-4 with, currently not being used, existing EU 003 Baghouse PJ-2.

(PTE Note - Even though PJ-2 is a larger baghouse capable of handling a larger airflow, since the blower will be the same there will be no change in actual airflow rate of 600 dscfm as a result of this changing of the baghouse. This means there will be no change in potential PM emissions.)

(This modification will affect EU No. 009, and also EU No. 003, which currently shows Baghouse PJ-2 as the PM emissions control device. EU No. 003 which is currently not being used to pneumatically transfer dry fly ash due to the use of wet fly ash as a raw material instead of dry fly ash) will be shown without an associated PM emission control device.)

- Modify the fly ash receiving/unloading area (EU No. 001) to receive and unload very large bags (super sacks) of powdered activated carbon (from fly ash from combustion of coal). This powdered activated carbon will be pneumatically transferred to Fly Ash/Carbon Silo Nos. 9 or 11 (EU No. 002), or to Carbon Storage Silo Nos. 8, 10, or 12 (EU No. 009). This powdered activated carbon will be mixed with activated carbon (from fly ash from combustion of wood) produced by the Standard Carbon facility to create a blended final product.

(PTE Note - Addition of this activity does not represent an increase in potential PM emissions from the facility as the emission control devices for fly ash receiving and the carbon storage silos (baghouses PJ-T, PJ-1 and PJ-2 (prev. PJ-4)) were already included in the facility PTE at maximum air flow rate for 8,760 hours/yr.)

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

(This modification affects EU Nos. 001, 002, and 009.)

- Addition of a shaker screen between the Kiln Surge Hopper and the Raymond Mill Receiving Hopper (EU No. 007) to remove sand from the kiln product prior to milling. All of the equipment associated with this shaker screen (feeder equipment, shaker screen, and outlet equipment) is all enclosed such that there are no direct air emissions from this operation. Any PM from the screening operation will be carried by the air stream to the Raymond Mill Receiving Hopper and the associated Baghouse PJ-3 emission control device.

(PTE Note – Addition of this shaker screen is exempt from permitting since it is not an emission source and will not result in any change in potential emissions.)

(This modification indirectly affects EU No. 007, as the shaker screen will be added to the description of this emission unit.)

- An existing currently not-in-use Baghouse PM emission control device located on top of Carbon Storage Silo No. 16 will be refurbished and put in service to control emission from transfer of carbon product to Carbon Storage Silo No. 16 (previously part of EU No. 010) and from the loading of truck or railcars from Carbon Storage Silo Nos. 14 and 16 (EU No. 011). Emissions from these operations, and the transfer of carbon product to Carbon Storage Silo No. 14, were previously all controlled by PM emissions control Baghouse PJ-6. This meant that carbon product could not be transferred to Carbon Storage Silo Nos. 14 and 16 at the same time. With the modification, Baghouse PJ-6 will control only Carbon Storage Silo No. 14 (EU No. 010) and the refurbished baghouse will control Carbon Storage Silo No. 16 (new EU No. 014) (along with truck/railcar loading (EU No. 011)), thereby allowing both silos to be loaded at the same time.

(PTE Note – This refurbished baghouse on Carbon Storage Silo No. 16 represents an additional emission point (and therefore an additional emissions unit now that Carbon Storage Silo Nos. 14 and 16 have separate emission control devices and exhausts) and an increase in the potential PM emissions from the facility.)

(This modification affects EU Nos. 010 and 011, and will require creation of new EU No. 14.)

Summary of EU Nos. Affected by modifications: 001, 002, 003, 004, 005, 007, 009, 010, 011 *(plus newly created EU Nos. 014, 015 and 016)*

EU Nos. not affected by modifications: 006, 012, and 013

E. Application Information:

Application Received and Complete on: 06/23/11

(Permit Application Processor (DZ) Note – Additional clarifications and corrections to the application were obtained during a 07/11/11 phone conversation with the applicant's consultant, and from the plant manager during a 07/12/11 site visit.)

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

II. Rule Applicability

This project is subject to the preconstruction review requirements of Chapter 403, Florida Statutes and Chapters 62-204 through 62-297, Florida Administrative Code (F.A.C.), as indicated below.

Subject to:	Y/N	Comments
Rule 62-210.300, F.A.C. - Project Not Subject to Prevention of Significant Deterioration or Nonattainment Requirements, F.A.C.	Y	not exempt from general permitting requirements
Rule 62-212.400, F.A.C. - Prevention of Significant Deterioration	N	facility is not a PSD major source
Rule 62-296.320(4), F.A.C. - General Particulate Emission Limiting Standards	Y	Kilns and Raymond Mill (EU Nos. 004, 005, and 006) are subject to Process Weight Table PM standards. Material handling operations are a potential source of unconfined particulate matter emissions.
Rules 62-296.320(1) and (2), F.A.C. - General Pollutant Emission Limiting Standards (VOCs and Odor)	Y	not expected to be a source of VOC, but could be a source of odors
Rule 62-296.400, F.A.C. - Stationary Source Emission Standards	N	there is no applicable source category
Rule 62-296.500, F.A.C. - Reasonably Available Control Technology (VOC)	N	Marion County is not an air quality maintenance area for ozone
Rule 62-296.700, F.A.C. - Reasonably Available Control Technology (PM)	N	this is a "new" facility, therefore not subject to PM RACT rule
Rule 62-204.800, F.A.C. - Standards of Performance for New Stationary Sources (NSPS)	N	there is no applicable source category
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants (NESHAPS - 40 CFR 61)	N	there is no applicable source category
Rule 62-204.800, F.A.C. National Emission Standard for Hazardous Air Pollutants for Source Categories a.k.a. MACT (NESHAPS - 40 CFR 63)	N	there is no applicable source category
Chapter 62-213, F.A.C. - Operation Permits for Major Sources of Air Pollution	N	facility is a synthetic non-Title V source
Rule 62-297.310, F.A.C. - General Compliance Test Requirements, F.A.C.	Y	VE testing is required for the baghouse emission control devices (EU Nos. 001, 002, and 004 thru 014)

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

III. Summary of Potential to Emit (PTE) Changes from Previous Constr. Permit (0830170-003-AC)
 (See II. D. Project Summary above for details of changes.)

Pollutant	Affected EU No. and Brief Description of Change	PTE as Modified (TPY)	Previous PTE (TPY)	Change in PTE (TPY)
PM/PM10	EU 014 - Operation of refurbished baghouse on Carbon Silo No. 16 (also controls emissions from loading of product into trucks or railcars)	0.68	NA (new emission source)	0.68
	EU 015- Kiln No. 1 Combustion Chamber	0.238	0.10	0.138
	EU 016 - Kiln No. 2 Combustion Chamber	0.148	0.10	0.048
	Total	1.066	0.2	0.866
NO _x	EU 015 - Kiln No. 1 Combustion Chamber	11.1	4.67	6.43
	EU 016 - Kiln No. 2 Combustion Chamber	6.89	4.67	2.22
	Total	17.99	9.34	8.65
CO	EU 015 - Kiln No. 1 Combustion Chamber	2.77	1.17	1.6
	EU 016 - Kiln No. 2 Combustion Chamber	1.72	1.17	0.55
	Total	4.49	2.34	2.15
VOC	EU 015 - Kiln No. 1 Combustion Chamber	0.222	0.09	0.132
	EU 016 - Kiln No. 2 Combustion Chamber	0.138	0.09	0.048
	Total	0.36	0.18	0.18
SO ₂	EU 015 - Kiln No. 1 Combustion Chamber	0.048	0.02	0.028
	EU 016 - Kiln No. 2 Combustion Chamber	0.03	0.02	0.01
	Total	0.078	0.04	0.038

(Kiln Combustion Chamber Potential to Emit Note - Kiln combustion chamber potential emissions are based upon maximum design fuel heat input rates for 8760 hours/year. Previous maximum permitted heat input rates for each kiln was 8 MMBtu/hr. Modified maximum design heat input rates are 19 MMBtu/hr for Kiln No. 1 and 11.8 MMBtu/hr for Kiln No. 2.)

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

IV. Conclusions

The emission limits proposed by the applicant will meet all of the requirements of Chapters 62-204 through 297, F.A.C.

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

V. Preliminary Determination

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. Additional details of this analysis may be obtained by contacting the project engineer at the Florida Department of Environmental Protection Air Resource Management, Southwest District 13051 North Telecom Parkway, Temple Terrace, Florida 33637-7600.

Pursuant to Section 403.087, Florida Statutes and Section 62-4.070, Florida Administrative Code, the Department 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).