AIR TESTING & CONSULTING

333 FALKENBURG RD. N. B-214 • TAMPA, FLORIDA 33619 • (813)651-0878 • Fax(813)653-9082

June 16, 2011

0830170-004-AC

Cindy Zhang-Torres
Department of Environmental Protection
13051 North Telecom Parkway
Temple Terrace, FL 33637-0926

Dept. of Environmental Protection
JUN 23 2011
Southwest Dist.

Re: Standard Carbon, LLC
Facility ID: ~~0830011~~ 0830170

Dear Cindy:

Enclosed are two copies of an application for a non-Title V air construction permit and a check for $1,250 to cover the application fee.

If you have any questions please call me at (813) 651-0878.

Sincerely,

Ken Given

Kenneth E. Given, P.E.
President

cc: Kristine Switt, Standard Carbon LLC

AIR CONSTRUCTION PERMIT APPLICATION

PREPARED FOR:

STANDARD CARBON LLC

DUNNELLON, FLORIDA

FACILITY ID: 0830170

0830170-004-AC

PREPARED BY:

ATC

AIR TESTING & CONSULTING, INC.

333 FALKENBURG ROAD, SUITE B-214

TAMPA, FLORIDA 33619

Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - NON-TITLE V SOURCE

See Instructions for Form No. 62-210.900(3)

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: **STANDARD CARBON LLC**	
2. Site Name: **(dba) STANDARD PURIFICATION**	
3. Facility Identification Number: **0830170** [ ] Unknown	
4. Facility Location: Street Address or Other Locator: **551 North U.S. Highway 41, 1 mile south of Romeo** City: **DUNNELLON** County: **MARION** Zip Code: **34432**	
5. Relocatable Facility? [ ] Yes [X] No	6. Existing Permitted Facility? [X] Yes [ ] No

Application Contact

1. Name and Title of Application Contact: **JAMES SHARPE / CEO**
2. Application Contact Mailing Address: Organization/Firm: **STANDARD CARBON LLC** Street Address: **551 North U.S. Highway 41** City: **DUNNELLON** County: **MARION** Zip Code: **34432**
3. Application Contact Telephone Numbers: Telephone: **(917) 583 - 0834** Fax: **(561) 624 - 5447**

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	06/23/11
2. Permit Number:	0830170-004-AC

Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

[ ] Initial non-Title V air operation permit for one or more existing, but previously unpermitted, emissions units.

[ ] Initial non-Title V air operation permit for one or more newly constructed or modified emissions units.

Current construction permit number:_____

[ ] Non-Title V air operation permit revision to address one or more newly constructed or modified emissions units.

Current construction permit number:_____

Operation permit number to be revised:_____

[ ] Initial non-Title V air operation permit under Rule 62-210.300(2)(b), F.A.C., for an existing facility seeking classification as a synthetic non-Title V source.

Current operation/construction permit number(s):

_____

[ ] Non-Title V air operation permit revision for a synthetic non-Title V source. Give reason for revision; e.g., to address one or more newly constructed or modified emissions units.

Operation permit number to be revised:_____

Reason for revision:_____

Air Construction Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

[X] Air construction permit to construct or modify one or more emissions units.

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

[ ] Air construction permit for one or more existing, but unpermitted, emissions units.

Owner/Authorized Representative

1. Name and Title of Owner/Authorized Representative:
   James Sharpe / CEO JSHARPE@STANDARDPURIFICATION.COM
2. Owner/Authorized Representative Mailing Address:
   Organization/Firm: Standard Carbon LLC
   Street Address: 551 North U.S. Highway 41
   City: Dunnellon State: Florida Zip Code: 34432
3. Owner/Authorized Representative Telephone Numbers:
   Telephone: (917) 583 - 0834 Fax: (561) 624 - 5447
4. Owner/Authorized Representative Statement:

   I, the undersigned, am the owner or authorized representative of the facility addressed in this application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.*

   Signature 6/19/11 Date

Dept. of Environmental Protection
JUN 23 2011
Southwest District

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: Kenneth E. Given
   Registration Number: 23023 Authorization Number: 27706
2. Professional Engineer Mailing Address:
   Organization/Firm: Air Testing & Consulting, Inc.
   Street Address: 333 N. Falkenburg Rd. Unit B-214
   City: Tampa State: Florida Zip Code: 33619
3. Professional Engineer Telephone Numbers:
   Telephone: (813) 651 - 0878 Fax: (813) 653 - 9082

4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [X], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature

Date 6/9/2011

(Seal)

Attach any exception to certification statement.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
001	Truck unloading with baghouse PJ-T	AC1F	$250
002	Transfer from truck unloading to storage silos 9 & 11 with baghouse PJ-1 or to silos 8, 10, 12 with Baghouse PJ-4	AC1F	$250
004	Kiln No. 2 w/combustion chamber No. 2 with baghouse SDC Model 48-SL-108	AC1F	$250
005	Kilns No. 1 w/combustion chamber No. 1 with baghouse SDC Model 48-SL-108	AC1F	-
009	Add a shaker screen to remove sand from unmilled carbon product; Replace PJ-4 with PJ-2	AC1F	$250
011	Add refurbished baghouse to capture emissions from silos 14 & 16	AC1F	$250

Application Processing Fee

Check one: [X] Attached - Amount: $1,250 [ ] Not Applicable

Construction/Modification Information

1. Description of Proposed Project or Alterations:
   1. Increase dryer No. 1 heat load to 18 mmBtu/hr and dryer No. 2 to 11 mmBtu/hr
   2. Replace baghouse PJ-4 with PJ-2
   3. Modify the truck dump to receive and unload powered activated carbon in super sacks. Set up so carbon can be transferred to silos 9 or 11 or to silos 8, 10 and 12.
   4. Add a shaker screen to remove sand from unmilled product prior to the Raymond Mill.
   5. Add a refurbished baghouse to handle emissions from silos 14 and 16 instead of using PJ-4

2. Projected or Actual Date of Commencement of Construction:

3. Projected Date of Completion of Construction:

Application Comment

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates: Zone: 17	East (km): 360.2	North (km): 3230.0	
2. Facility Latitude/Longitude: Latitude (DD/MM/SS): 29/11/33 N	Longitude (DD/MM/SS): 82/26/17 W		
3. Governmental Facility Code: 0	4. Facility Status Code: C	5. Facility Major Group SIC Code: 28	6. Facility SIC(s): 2819
7. Facility Comment (limit to 500 characters):			

Facility Contact

1. Name and Title of Facility Contact: Kristine Switt/Plant Manager		
2. Facility Contact Mailing Address: Organization/Firm: Acticarb LLC Street Address: 551 North U.S. Highway 41 City: Dunnellon	State: Florida	Zip Code: 34432
3. Facility Contact Telephone Numbers: Telephone: (352) 465 – 5959	Fax: (352) 465 - 0679	

Facility Regulatory Classifications

Check all that apply:

1. [ ] Small Business Stationary Source?	[ ] Unknown
2. [X] Synthetic Non-Title V Source?	
3. [X] Synthetic Minor Source of Pollutants Other than HAPs?	
4. [ ] Synthetic Minor Source of HAPs?	
5. [ ] One or More Emissions Units Subject to NSPS?	
6. [ ] One or More Emission Units Subject to NESHAP Recordkeeping or Reporting?	
7. Facility Regulatory Classifications Comment (limit to 200 characters):	

Rule Applicability Analysis

Federal: None

State: Facility is subject to F.A.C.: 62-4 - permitting requirements, 62-210 - Administrative permit corrections, AOR, Circumvention, Excess emissions, Renewal, 62-296 - no objectionable odors, visible emission limitations, emission rates, unconfined emissions and 62-297 - testing requirements and 62.297.620(4) - Alternative Testing Procedures.

Local: None

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap lb/hour	tons/year	4. Basis for Emissions Cap	5. Pollutant Comment
PM	SM				

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: [ ] Attached, Document ID:___ [ ] Not Applicable [X] Waiver Requested
2. Facility Plot Plan: [ ] Attached, Document ID:____ [ ] Not Applicable [X] Waiver Requested
3. Process Flow Diagram(s): [X] Attached, Document ID:__C____ [ ] Not Applicable [ ] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [ ] Attached, Document ID:____ [ ] Not Applicable [X] Waiver Requested
5. Supplemental Information for Construction Permit Application: [ ] Attached, Document ID:_____ [ ] Not Applicable
6. Supplemental Requirements Comment:

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap lb/hour	tons/year	4. Basis for Emissions Cap	5. Pollutant Comment
PM	SM				

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: [ ] Attached, Document ID:___ [ ] Not Applicable [X] Waiver Requested
2. Facility Plot Plan: [ ] Attached, Document ID:____ [ ] Not Applicable [X] Waiver Requested
3. Process Flow Diagram(s): [X] Attached, Document ID:__C____ [ ] Not Applicable [ ] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [ ] Attached, Document ID:____ [ ] Not Applicable [X] Waiver Requested
5. Supplemental Information for Construction Permit Application: [ ] Attached, Document ID:_____ [ ] Not Applicable
6. Supplemental Requirements Comment:

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through G as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Truck dump.

3. Emissions Unit Identification Number:
ID: 001
[X] No ID
[ ] ID Unknown

4. Emissions Unit Status Code: C	5. Initial Startup Date:	6. Emissions Unit Major Group SIC Code: 28

7. Emissions Unit Comment: (Limit to 500 Characters)
Original project - Fly ash to be unloaded from a truck into a receiving hopper in a new building that is be connected to baghouse PJ-T for fugitive emissions control.

The truck dump system will be modified so powered activated carbon brought to the site in super sacks can be unloaded and transferred to storage silos.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (limit to 200 characters per device or method):
PJ-T – design air flow 6,000 cfm, 1500 ft^2 area – 100 bags x 120" long, 4:1 air to cloth ratio

2. Control Device or Method Code(s): 018

Emissions Unit Details

1. Package Unit:
Manufacturer: Model Number:

2. Generator Nameplate Rating: MW

3. Incinerator Information:
Dwell Temperature: °F
Dwell Time: seconds
Incinerator Afterburner Temperature: °F

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: mmBtu/hr

2. Maximum Incineration Rate: lb/hr tons/day

3. Maximum Process or Throughput Rate: 4 TPH

4. Maximum Production Rate:

5. Requested Maximum Operating Schedule:
hours/day days/week
weeks/year 8,760 hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

B. EMISSION POINT (STACK/VENT) INFORMATION

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram?	2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: V	6. Stack Height: 10 feet	7. Exit Diameter: 1.5 feet
8. Exit Temperature: 77 °F	9. Actual Volumetric Flow Rate: 6,000 acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone:	East (km):	North (km):
14. Emission Point Comment (limit to 200 characters):		

C. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Dumping of activated carbon from super sacks		
2. Source Classification Code (SCC):	3. SCC Units: Tons Handled	
4. Maximum Hourly Rate: 4	5. Maximum Annual Rate: 35,040	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

Emissions Unit Information Section 1 of 7

Pollutant Detail Information Page 1 of 1

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: PM		2. Pollutant Regulatory Code: EL
3. Primary Control Device Code: 018	4. Secondary Control Device Code:	5. Total Percent Efficiency of Control:
6. Potential Emissions: 0.41 lb/hour 1.8 tons/year		7. Synthetically Limited? [ ]
8. Emission Factor: 0.008 grs/cf Reference: Supplier of filter bags		9. Emissions Method Code: 0
10. Calculation of Emissions (limit to 600 characters): E = 6,000 cfm x 60 min/hr x 0.008 grs/cf x 1 lb/7,000 grs = 0.41 lbs/hr 0.41 lbs/hr x 8,760 hrs/yr x ton/2,000 lbs = 1.8 tons/yr		
11. Pollutant Potential Emissions Comment (limit to 200 characters):		

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: lb/hour	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

E. VISIBLE EMISSIONS INFORMATION
(Only Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE05	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: DEP Method 9	
2. Visible Emissions Comment (limit to 200 characters): Per 62-297-620(4) – VE of 5% in place of particulate matter test (EPA Method 5)	

F. CONTINUOUS MONITOR INFORMATION
(Only Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

G. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: C [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [ ] Not Applicable [X] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Previously submitted, Date:_____ [X] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [X] Not Applicable
10. Supplemental Requirements Comment:

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through G as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Transfer of powdered carbon from truck unloading to storage silos

3. Emissions Unit Identification Number:
ID: 002
[ ] No ID
[ ] ID Unknown

4. Emissions Unit Status Code: C	5. Initial Startup Date:	6. Emissions Unit Major Group SIC Code: 28

7. Emissions Unit Comment: (Limit to 500 Characters)

Powdered carbon will be transferred from truck receiving to storage silo numbers 9 and 11 with baghouse PJ-1 or to silos 8, 10 and 12 with baghouse PJ-2

Emissions Unit Information Section 2 of 7

Emissions Unit Control Equipment

1. Control Equipment/Method Description (limit to 200 characters per device or method):

PJ-1 – Kinetic-Air model No. 72-SL-120, pulse jet vacuum receiver dust collector 4,000 cfm

PJ-2 – Kinetic-Air model No. 36-BV-84, pulse jet vacuum receiver dust collector 1,000 cfm

2. Control Device or Method Code(s): 018

Emissions Unit Details

1. Package Unit:
   Manufacturer: Model Number:
2. Generator Nameplate Rating: MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: mmBtu/hr
2. Maximum Incineration Rate: lb/hr tons/day
3. Maximum Process or Throughput Rate: 4 TPH
4. Maximum Production Rate:
5. Requested Maximum Operating Schedule:
   hours/day days/week
   weeks/year 8,760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):

B. EMISSION POINT (STACK/VENT) INFORMATION

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram?	2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: H	6. Stack Height: 8 feet	7. Exit Diameter: feet
8. Exit Temperature: 77 °F	9. Actual Volumetric Flow Rate: 4,000 acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):		
14. Emission Point Comment (limit to 200 characters):		

C. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Transfer of powdered carbon		
2. Source Classification Code (SCC):	3. SCC Units: Tons Handled	
4. Maximum Hourly Rate: 4	5. Maximum Annual Rate: 35,040	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment ____ of ____

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

Emissions Unit Information Section 2 of 7

Pollutant Detail Information Page 1 of 1

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: PM		2. Pollutant Regulatory Code: EL
3. Primary Control Device Code: 018	4. Secondary Control Device Code:	5. Total Percent Efficiency of Control:
6. Potential Emissions: 0.274 lb/hour 1.2 tons/year		7. Synthetically Limited? [ ]
8. Emission Factor: 0.008 grs/cf Reference: Baghouse supplier		9. Emissions Method Code: 0
10. Calculation of Emissions (limit to 600 characters): PJ-1: E = 4,000 cfm x 60 min/hr x 0.008 grs/cf x 1 lb/7,000 grs = 0.274 lbs/hr 0.274 lbs/hr x 8,760 hrs/yr x ton/2,000 lbs = 1.2 tons/yr PJ-2: E = 1,000 cfm x 60 min/hr x 0.008 grs/cf x 1 lb/7,000 grs = 0.0686 lbs/hr 0.0686 lbs/hr x 8,760 hrs/yr x ton/2,000 lbs = 0.3 tons/yr		
11. Pollutant Potential Emissions Comment (limit to 200 characters):		

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: lb/hour	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

E. VISIBLE EMISSIONS INFORMATION
(Only Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: DEP Method 9	
3. Visible Emissions Comment (limit to 200 characters): Per 62-297-620(4) – VE of 5% in place of particulate matter test (EPA Method 5)	

F. CONTINUOUS MONITOR INFORMATION
(Only Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

G. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: C [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID:_____ [ ] Not Applicable [X] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [ ] Not Applicable [X] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Previously submitted, Date:_____ [X] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [X] Not Applicable
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[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in This Section (limit to 60 characters):

Kiln No. 1 w/ Combustion Chamber No. 1

3. Emissions Unit Identification Number: ID: 005 — [ ] No ID [ ] ID Unknown

4. Emissions Unit Status Code: A	5. Initial Startup Date:	6. Emissions Unit Major Group SIC Code: 28

7. Emissions Unit Comment: (Limit to 500 Characters)
Kiln will be fired with natural gas. Kiln No. 1 burner will be replaced with a larger one rated at 18 MMBtu/hr. The fly ash has a much higher moisture content (75%) than expected (25%) and requires more heat for processing at desired rates.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (limit to 200 characters per device or method):

Cyclone separator followed by a SDC Model 48-SL-108 baghouse

2. Control Device or Method Code(s): 018, 075

Emissions Unit Details

1. Package Unit:
   Manufacturer: Model Number:
2. Generator Nameplate Rating: MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: 18 mmBtu/hr
2. Maximum Incineration Rate: lb/hr tons/day
3. Maximum Process or Throughput Rate: 4 TPH
4. Maximum Production Rate:
5. Requested Maximum Operating Schedule:
   hours/day days/week
   weeks/year 8,760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):

B. EMISSION POINT (STACK/VENT) INFORMATION

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram?		2. Emission Point Type Code: 2
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: V	6. Stack Height: 35 feet	7. Exit Diameter: 1.2 feet
8. Exit Temperature: 400 °F	9. Actual Volumetric Flow Rate:	10. Water Vapor: 10 %
11. Maximum Dry Standard Flow Rate: 2,500 dscfm		12. Nonstack Emission Point Height: 35 feet
13. Emission Point UTM Coordinates: Zone:	East (km):	North (km):
14. Emission Point Comment (limit to 200 characters):		

Emissions Unit Information Section 3 of 7

C. SEGMENT (PROCESS/FUEL) INFORM

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 charact Processing of fly ash to activated carbon		
2. Source Classification Code (SCC):	3. SCC Units: To	
4. Maximum Hourly Rate: 4	5. Maximum Annual Rate: 35,040	6.
7. Maximum % Sulfur:	8. Maximum % Ash:	9.
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 charact Burning of natural gas		
2. Source Classification Code (SCC): 3-06-001-05	3. SCC Units:	
4. Maximum Hourly Rate: 0.0171	5. Maximum Annual Rate: 150.2	6.
7. Maximum % Sulfur:	8. Maximum % Ash:	9.
10. Segment Comment (limit to 200 characters): The emissions calculations for the burner are in attachment		

C. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Processing of fly ash to activated carbon		
2. Source Classification Code (SCC):	3. SCC Units: Tons Processed	
4. Maximum Hourly Rate: 4	5. Maximum Annual Rate: 35,040	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Burning of natural gas		
2. Source Classification Code (SCC): 3-06-001-05	3. SCC Units: MMCF	
4. Maximum Hourly Rate: 0.0171	5. Maximum Annual Rate: 150.2	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1050
10. Segment Comment (limit to 200 characters): The emissions calculations for the burner are in attachment		

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: PM		2. Pollutant Regulatory Code: EL
3. Primary Control Device Code: 018	4. Secondary Control Device Code: 075	3. Primary Control Device Code: 018
6. Potential Emissions: 8.48 lb/hour 37.14 tons/year		7. Synthetically Limited? [X]
8. Emission Factor: 5.52 lbs/hr Reference: 62-296.320(a)2 F.A.C.		9. Emissions Method Code: 0
10. Calculation of Emissions (limit to 600 characters): $E = 3.59 \times P^{0.62}$ $E = 3.59 \times 4^{0.62} = 8.48$ lbs/hr 8.48 lbs/hr x 8,760 hrs/yr x ton/2,000 lbs = 37.14 tons/yr		
11. Pollutant Potential Emissions Comment (limit to 200 characters):		

Allowable Emissions Allowable Emissions 1 of 1

1. Pollutant Emitted: PM	2. Pollutant Regulatory Code: EL
3. Requested Allowable Emissions and Units: 5 lbs/hr	4. Equivalent Allowable Emissions: 5 lb/hour 21.9 tons/year
5. Method of Compliance (limit to 60 characters): EPA Method 5	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Expected emissions are 3.27 tons/yr. Reduced permitted emissions to reduce application cost.	

E. VISIBLE EMISSIONS INFORMATION
(Only Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE05	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: DEP Method 9	
4. Visible Emissions Comment (limit to 200 characters): Per 62-297-620(4) – VE of 5% in place of particulate matter test (EPA Method 5)	

F. CONTINUOUS MONITOR INFORMATION
(Only Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

G. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: C [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID:_____ [ ] Not Applicable [X] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [ ] Not Applicable [X] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Previously submitted, Date:_____ [X] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [X] Not Applicable
10. Supplemental Requirements Comment:

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through G as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Kiln No. 2 w/ Combustion Chamber No. 2

3. Emissions Unit Identification Number:
ID: 004
[ ] No ID
[ ] ID Unknown

4. Emissions Unit Status Code: A	5. Initial Startup Date:	6. Emissions Unit Major Group SIC Code: 28

7. Emissions Unit Comment: (Limit to 500 Characters)
Kiln will be fired with natural gas. Kiln No. 2 burner will be replaced with a larger one rated at 11 MMBtu/hr

The fly ash has a much higher moisture content (75%) than expected (25%) and requires more heat for processing at desired rates.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (limit to 200 characters per device or method):
   Cyclone separator followed by a SDC Model 48-SL-108 baghouse

2. Control Device or Method Code(s): 018, 075

Emissions Unit Details

1. Package Unit:
   Manufacturer: Model Number:
2. Generator Nameplate Rating: MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: 11 mmBtu/hr
2. Maximum Incineration Rate: lb/hr tons/day
3. Maximum Process or Throughput Rate: 4
4. Maximum Production Rate:
5. Requested Maximum Operating Schedule:
   hours/day days/week
   weeks/year 8,760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):

B. EMISSION POINT (STACK/VENT) INFORMATION

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram?	2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: V	6. Stack Height: 35 feet	7. Exit Diameter: 1.2 feet
8. Exit Temperature: 400 °F	9. Actual Volumetric Flow Rate: 4,600 acfm	10. Water Vapor: 10 %
11. Maximum Dry Standard Flow Rate: 2,500 dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone:	East (km):	North (km):
14. Emission Point Comment (limit to 200 characters):		

C. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Processing of fly ash to activated carbon		
2. Source Classification Code (SCC): 3-05-009-01	3. SCC Units: Tons Processed	
4. Maximum Hourly Rate: 4	5. Maximum Annual Rate: 35,040	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): 3-05-009-01- Dryer – Clay & Fly Ash Sintering		

Segment Description and Rate: Segment 2 of 2

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Burning of natural gas		
2. Source Classification Code (SCC): 3-06-001-05	3. SCC Units: MMCF	
4. Maximum Hourly Rate: 0.0105	5. Maximum Annual Rate: 91.77	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 1050
10. Segment Comment (limit to 200 characters): The emissions calculations for the burner are in attachment		

Emissions Unit Information Section 4 of 7

Pollutant Detail Information Page 1 of 1

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: PM	2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code: 018	4. Secondary Control Device Code: 075	5. Total Percent Efficiency of Control:
6. Potential Emissions: 8.48 lb/hour 37.14 tons/year		7. Synthetically Limited? [X]
8. Emission Factor: 5.52 lbs/hr Reference: 62-296.320(a)2 F.A.C.		9. Emissions Method Code: 0
10. Calculation of Emissions (limit to 600 characters): $E = 3.59 \times P^{0.62}$ $E = 3.59 \times 4^{0.62} = 8.48$ lbs/hr 8.48 lbs/hr x 8,760 hrs/yr x ton/2,000 lbs = 37.14 tons/yr		
11. Pollutant Potential Emissions Comment (limit to 200 characters):		

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: OTHER	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 5 lbs/hr	4. Equivalent Allowable Emissions: 5 lb/hour 21.9 tons/year
5. Method of Compliance (limit to 60 characters): EPA Method 5	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters): Expected emissions are 3.27 tons/yr. Reduced permitted emissions to reduce application cost.	

E. VISIBLE EMISSIONS INFORMATION
(Only Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: DEP Method 9	
5. Visible Emissions Comment (limit to 200 characters): Per 62-297-620(4) – VE of 5% in place of particulate matter test (EPA Method 5)	

F. CONTINUOUS MONITOR INFORMATION
(Only Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

G. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: C [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID:_____ [ ] Not Applicable [X] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [ ] Not Applicable [X] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Previously submitted, Date:_____ [X] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [X] Not Applicable
10. Supplemental Requirements Comment:

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through G as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Raymond Mill for grinding carbon plus Outlet Hopper. A shaker screen will be added to remove sand from unmilled carbon prior to the Raymond Mill

3. Emissions Unit Identification Number:
ID: 006
[ ] No ID
[ ] ID Unknown

4. Emissions Unit Status Code: A	5. Initial Startup Date:	6. Emissions Unit Major Group SIC Code: 28

7. Emissions Unit Comment: (Limit to 500 Characters)
Shaker screen – A Rotex model A8G24L-1M is to be added to the material flow from the kilns going into the surge hopper from the cooling screw. The shaker screen unit entirely encloses the material. Sand (75 lb/cf) entrained in the unmilled product will be separated by the shaker and will pass through a rotary air lock into an enclosed bin, dropping by gravity. This bin will be changed out periodically with an empty bin. The remainder of the material stream (product) will drop into the surge hopper from the new shaker screen. Air displaced in the closed bins will be removed through the system.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (limit to 200 characters per device or method):
   Mikro-Pulsaire, Model 64S820
   Air flow –3,600 acfm

2. Control Device or Method Code(s): 018

Emissions Unit Details

1. Package Unit:
   Manufacturer: Model Number:
2. Generator Nameplate Rating: MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: mmBtu/hr
2. Maximum Incineration Rate: lb/hr tons/day
3. Maximum Process or Throughput Rate: 4 TPH
4. Maximum Production Rate:
5. Requested Maximum Operating Schedule:
   hours/day days/week
   weeks/year 8,760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):

B. EMISSION POINT (STACK/VENT) INFORMATION

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram?	2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: H	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: 77 °F	9. Actual Volumetric Flow Rate: 3,600 acfm	10. Water Vapor: 2 %
11. Maximum Dry Standard Flow Rate: 3,400 dscfm	12. Nonstack Emission Point Height: 50 feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):		
14. Emission Point Comment (limit to 200 characters):		

C. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Milling of activated carbon		
2. Source Classification Code (SCC): 3-05-006-13	3. SCC Units: Tons Handled	
4. Maximum Hourly Rate: 4	5. Maximum Annual Rate: 35,040	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters): SCC code for cement raw material Grinding and Drying		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

Emissions Unit Information Section 5 of 7

Pollutant Detail Information Page 1 of 1

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: PM		2. Pollutant Regulatory Code: EL
3. Primary Control Device Code: 018	4. Secondary Control Device Code: 075	5. Total Percent Efficiency of Control:
6. Potential Emissions: 8.48 lb/hour 37.14 tons/year		7. Synthetically Limited? [X]
8. Emission Factor: 8.48 lb/hour Reference: 62-296.320(a)2 F.A.C.		9. Emissions Method Code: 0
10. Calculation of Emissions (limit to 600 characters): $E = 3.59 \times P^{0.62}$ $E = 3.59 \times 4^{0.62} = 8.48$ lbs/hr x hr/ 4 tons = 2.12 lbs/ton E = 8.48 lbs/hr x 8,760 hrs/yr x ton/2,000 lbs = 37.14 tons/yr		
11. Pollutant Potential Emissions Comment (limit to 200 characters): No emissions expected from the shaker screen.		

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code: ESCTV	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units: 5lbs/hr	4. Equivalent Allowable Emissions: 5 lb/hour 21.9 tons/year
5. Method of Compliance (limit to 60 characters): EPA Method 5	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

E. VISIBLE EMISSIONS INFORMATION
(Only Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: DEP Method 9	
6. Visible Emissions Comment (limit to 200 characters): Per 62-297-620(4) – VE of 5% in place of particulate matter test (EPA Method 5)	

F. CONTINUOUS MONITOR INFORMATION
(Only Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

G. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: C [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [ ] Not Applicable [X] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Previously submitted, Date:_____ [X] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [X] Not Applicable
10. Supplemental Requirements Comment:

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through G as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Carbon Silo loading and storage with Baghouse

3. Emissions Unit Identification Number:
ID: 009
[X] No ID
[ ] ID Unknown

4. Emissions Unit Status Code: A	5. Initial Startup Date:	6. Emissions Unit Major Group SIC Code: 28

7. Emissions Unit Comment: (Limit to 500 Characters)
Carbon is pneumatically transferred from the Raymond Mill outlet hopper at 600 cfm. The carbon feeds to silos 8, 10 or 12. The facility will replace PJ-4 with PJ-2 which is not presently in use.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (limit to 200 characters per device or method):
   PJ-2 – Kinetic-Air model No. 36-BV-84, pulse jet vacuum receiver dust collector
   600 cfm

2. Control Device or Method Code(s): 018

Emissions Unit Details

1. Package Unit:
   Manufacturer: Model Number:
2. Generator Nameplate Rating: MW
3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: mmBtu/hr
2. Maximum Incineration Rate: lb/hr tons/day
3. Maximum Process or Throughput Rate: 8 TPH
4. Maximum Production Rate:
5. Requested Maximum Operating Schedule:
   hours/day days/week
   weeks/year 8,760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):

B. EMISSION POINT (STACK/VENT) INFORMATION

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram?	2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: H	6. Stack Height: 8 feet	7. Exit Diameter: feet
8. Exit Temperature: 77 °F	9. Actual Volumetric Flow Rate: 600 acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):		
14. Emission Point Comment (limit to 200 characters): The baghouse has a vent in its side, there is no stack.		

C. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Transfer of carbon to storage		
2. Source Classification Code (SCC):	3. SCC Units: Tons Handled	
4. Maximum Hourly Rate: 8	5. Maximum Annual Rate: 70,080	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment ____ of ____

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

Emissions Unit Information Section 6 of 7

Pollutant Detail Information Page 1 of 1

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: PM	2. Pollutant Regulatory Code: EL	
3. Primary Control Device Code: 018	4. Secondary Control Device Code: 075	5. Total Percent Efficiency of Control:
6. Potential Emissions: 0.041 lb/hour 0.18 tons/year		7. Synthetically Limited? [ ]
8. Emission Factor: 0.008 grs/cf Reference: Manufacturer		9. Emissions Method Code: 0
10. Calculation of Emissions (limit to 600 characters): PJ-2: E = 600 cfm x 60 min/hr x 0.008 grs/cf x 1 lb/7,000 grs = 0.041 lbs/hr 0.041 lbs/hr x 8,760 hrs/yr x ton/2,000 lbs = 0.18 tons/yr		
11. Pollutant Potential Emissions Comment (limit to 200 characters):		

Allowable Emissions Allowable Emissions ____ of ____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

E. VISIBLE EMISSIONS INFORMATION
(Only Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE05	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: DEP Method 9	
7. Visible Emissions Comment (limit to 200 characters): Per 62-297-620(4) – VE of 5% in place of particulate matter test (EPA Method 5)	

F. CONTINUOUS MONITOR INFORMATION
(Only Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

G. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Process Flow Diagram [X] Attached, Document ID: C [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID:_____ [ ] Not Applicable [X] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [ ] Not Applicable [X] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Previously submitted, Date:_____ [X] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [X] Not Applicable
10. Supplemental Requirements Comment:

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through G as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

A. GENERAL EMISSIONS UNIT INFORMATION

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)

[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.

[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

2. Description of Emissions Unit Addressed in This Section (limit to 60 characters):
Truck/Railcar bulk loading system using Storage Silos #14 & #16 and a fabric filter to control emissions. Trucks are loaded from the silos by gravity through a Rotor Lock valve.

3. Emissions Unit Identification Number:
ID: 011
[ ] No ID
[ ] ID Unknown

4. Emissions Unit Status Code: A	5. Initial Startup Date:	6. Emissions Unit Major Group SIC Code: 28

7. Emissions Unit Comment: (Limit to 500 Characters)
Carbon is received into Carbon Silos #14 & #16 from Carbon Silos 8, 10, or 12. Carbon Silos # 14 and #16 are positioned above the railroad tracks where trucks/railcars are loaded. The silo exhausts through a refurbished baghouse. Also, when the trucks/railcars are loaded the exhaust is captured by the refurbished baghouse.

Emissions Unit Control Equipment

1. Control Equipment/Method Description (limit to 200 characters per device or method):
   Flex-Kleen Model 84BVBS 1611G – air flow 600 cfm

2. Control Device or Method Code(s): 018

Emissions Unit Details

1. Package Unit:
   Manufacturer: Model Number:

2. Generator Nameplate Rating: MW

3. Incinerator Information:
   Dwell Temperature: °F
   Dwell Time: seconds
   Incinerator Afterburner Temperature: °F

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate: mmBtu/hr

2. Maximum Incineration Rate: lb/hr tons/day

3. Maximum Process or Throughput Rate: 12 TPH

4. Maximum Production Rate:

5. Requested Maximum Operating Schedule:
   hours/day days/week
   weeks/year 8,760 hours/year

6. Operating Capacity/Schedule Comment (limit to 200 characters):

B. EMISSION POINT (STACK/VENT) INFORMATION

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram?	2. Emission Point Type Code: 1	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point):		
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:		
5. Discharge Type Code: V	6. Stack Height: feet	7. Exit Diameter: feet
8. Exit Temperature: 77 °F	9. Actual Volumetric Flow Rate: 600 acfm	10. Water Vapor: %
11. Maximum Dry Standard Flow Rate: dscfm	12. Nonstack Emission Point Height: 10 feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):		
14. Emission Point Comment (limit to 200 characters):		

C. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Transfer of activated carbon to Silos Nos. 14 & 16 which are used to fill trucks or railcars by gravity feed through a Rotor Lock valve.		
2. Source Classification Code (SCC):	3. SCC Units: Tons Handled	
4. Maximum Hourly Rate: 12	5. Maximum Annual Rate: 105,120	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment _____ of _____

1. Segment Description (Process/Fuel Type) (limit to 500 characters):		
2. Source Classification Code (SCC):	3. SCC Units:	
4. Maximum Hourly Rate:	5. Maximum Annual Rate:	6. Estimated Annual Activity Factor:
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit:
10. Segment Comment (limit to 200 characters):		

D. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

Potential Emissions

1. Pollutant Emitted: PM		2. Pollutant Regulatory Code: EL
3. Primary Control Device Code: 018	4. Secondary Control Device Code:	5. Total Percent Efficiency of Control:
6. Potential Emissions: 0.1543 lbs/hr 0.675 tons/year		7. Synthetically Limited? [ ]
8. Emission Factor: 16.76 lbs/hr Reference: 62-296.320(a)2 F.A.C.		9. Emissions Method Code: 0
10. Calculation of Emissions (limit to 600 characters): E = 600 cfm x 60 min/hr x 0.03 grs/cf x 1 lb/7,000 grs = 0.1543 lbs/hr 0.1543 lbs/hr x 8,760 hrs/yr x ton/2,000 lbs = 0.676 tons/yr		
11. Pollutant Potential Emissions Comment (limit to 200 characters): Carbon is gravity fed into trucks or railcars. Venting is through silo baghouse		

Allowable Emissions Allowable Emissions 1 of 1

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

E. VISIBLE EMISSIONS INFORMATION
(Only Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation 1 of 1

1. Visible Emissions Subtype: VE20	2. Basis for Allowable Opacity: [X] Rule [ ] Other
3. Requested Allowable Opacity: Normal Conditions: 5 % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance: DEP Method 9	
8. Visible Emissions Comment (limit to 200 characters): Per 62-297-620(4) – VE of 5% in place of particulate matter test (EPA Method 5)	

F. CONTINUOUS MONITOR INFORMATION
(Only Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[ ] Rule [ ] Other
4. Monitor Information: Manufacturer: Model Number: Serial Number:	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

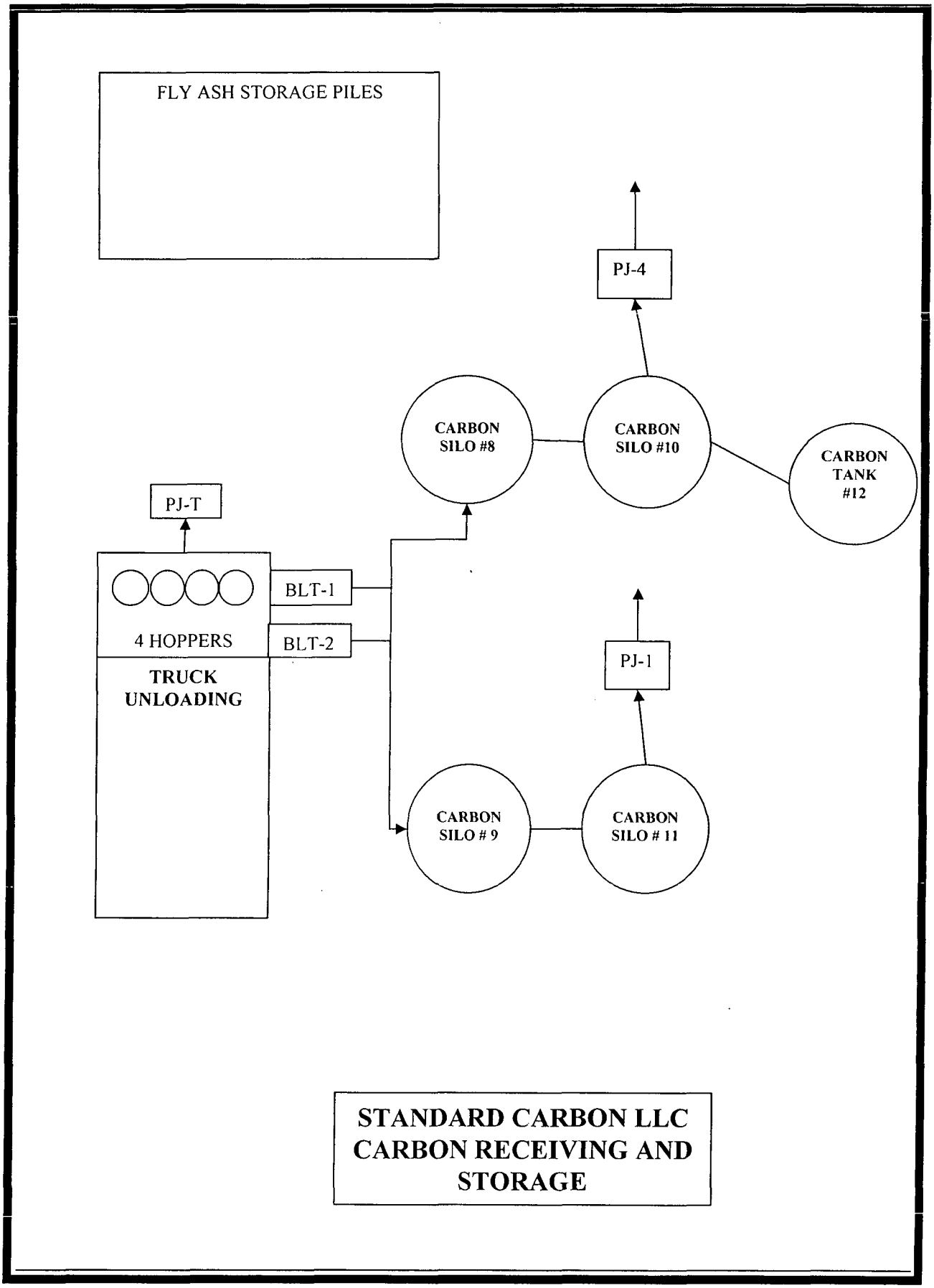
G. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Supplemental Requirements

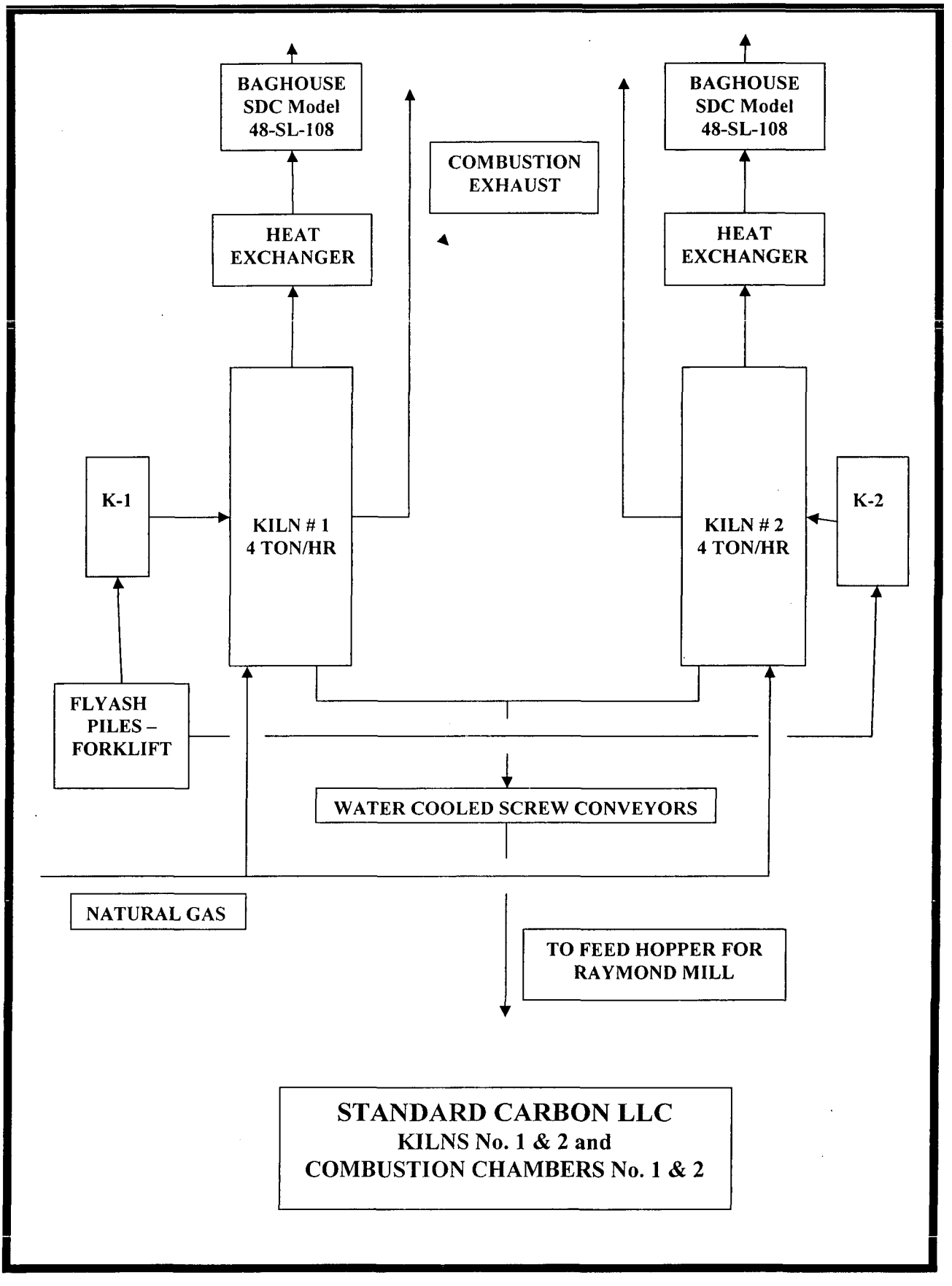
1. Process Flow Diagram [X] Attached, Document ID: C [ ] Not Applicable [ ] Waiver Requested
2. Fuel Analysis or Specification [ ] Attached, Document ID:_____ [ ] Not Applicable [X] Waiver Requested
3. Detailed Description of Control Equipment [ ] Attached, Document ID:_____ [ ] Not Applicable [X] Waiver Requested
4. Description of Stack Sampling Facilities [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
5. Compliance Test Report [ ] Attached, Document ID:_____ [ ] Previously submitted, Date:_____ [X] Not Applicable
6. Procedures for Startup and Shutdown [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
7. Operation and Maintenance Plan [ ] Attached, Document ID:_____ [X] Not Applicable [ ] Waiver Requested
8. Supplemental Information for Construction Permit Application [ ] Attached, Document ID:_____ [X] Not Applicable
9. Other Information Required by Rule or Statute [ ] Attached, Document ID:_____ [X] Not Applicable
10. Supplemental Requirements Comment:

ATTACHMENTS

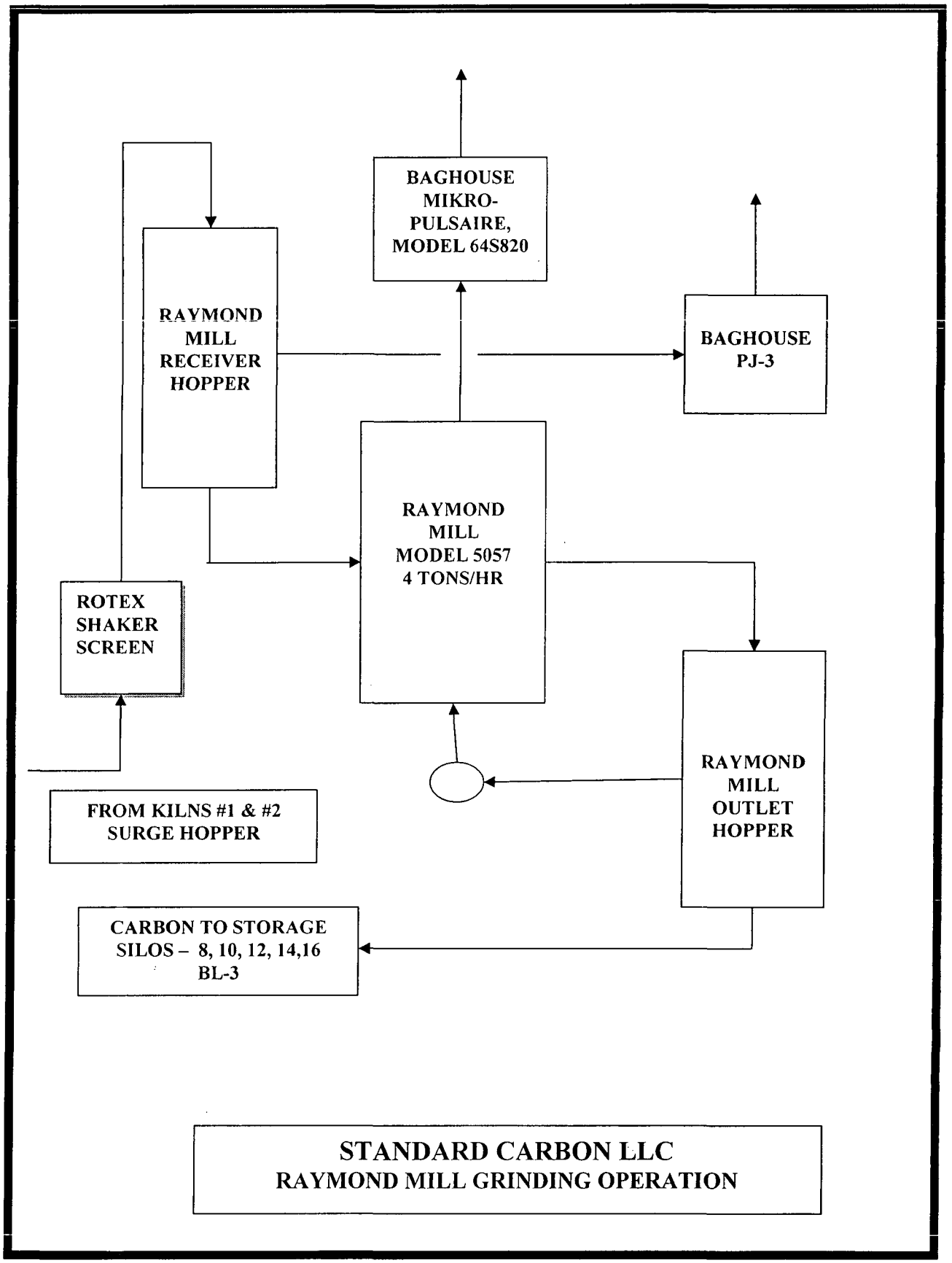
C. PROCESS FLOW DIAGRAM



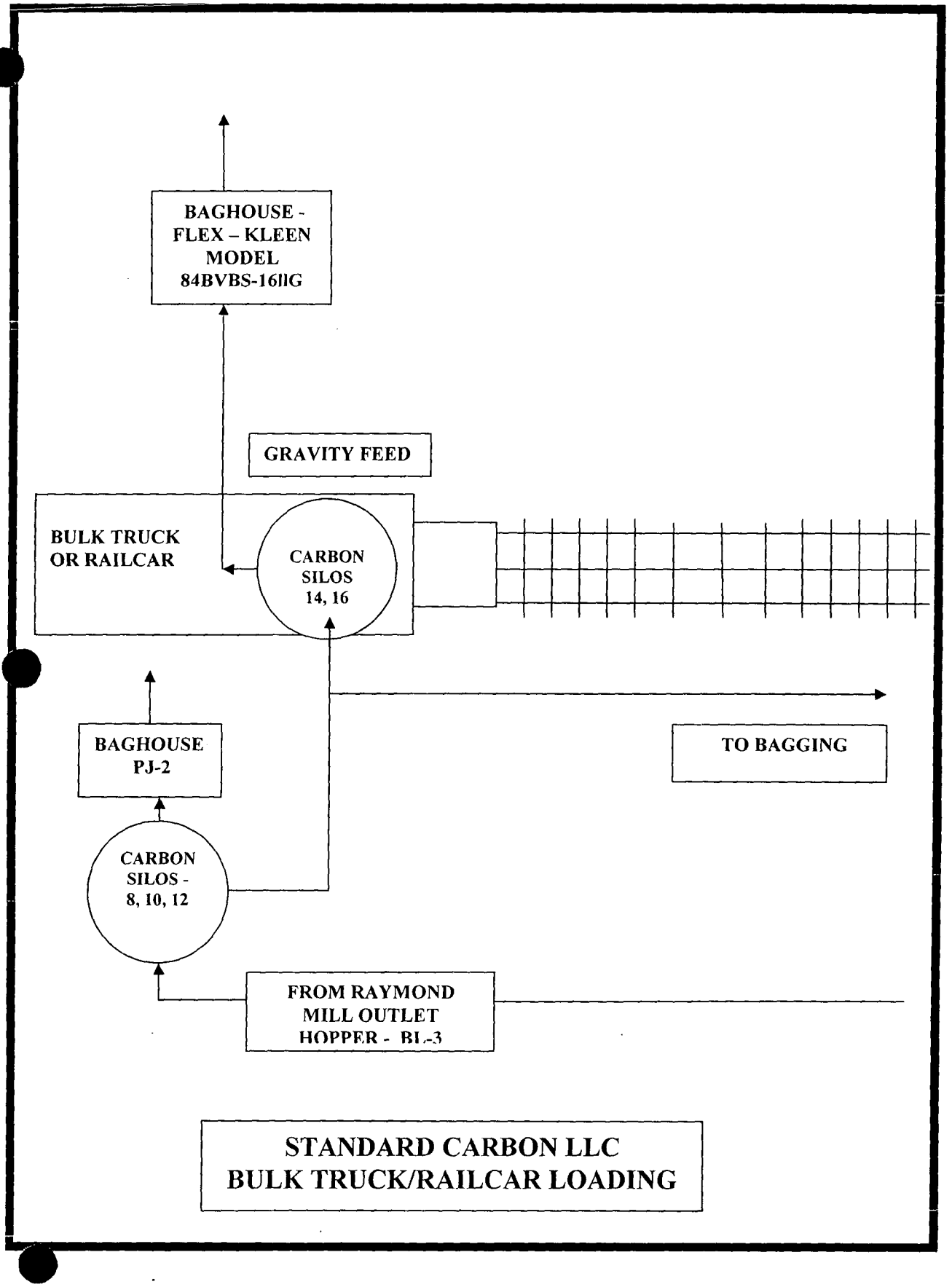
STANDARD CARBON LLC
CARBON RECEIVING AND STORAGE



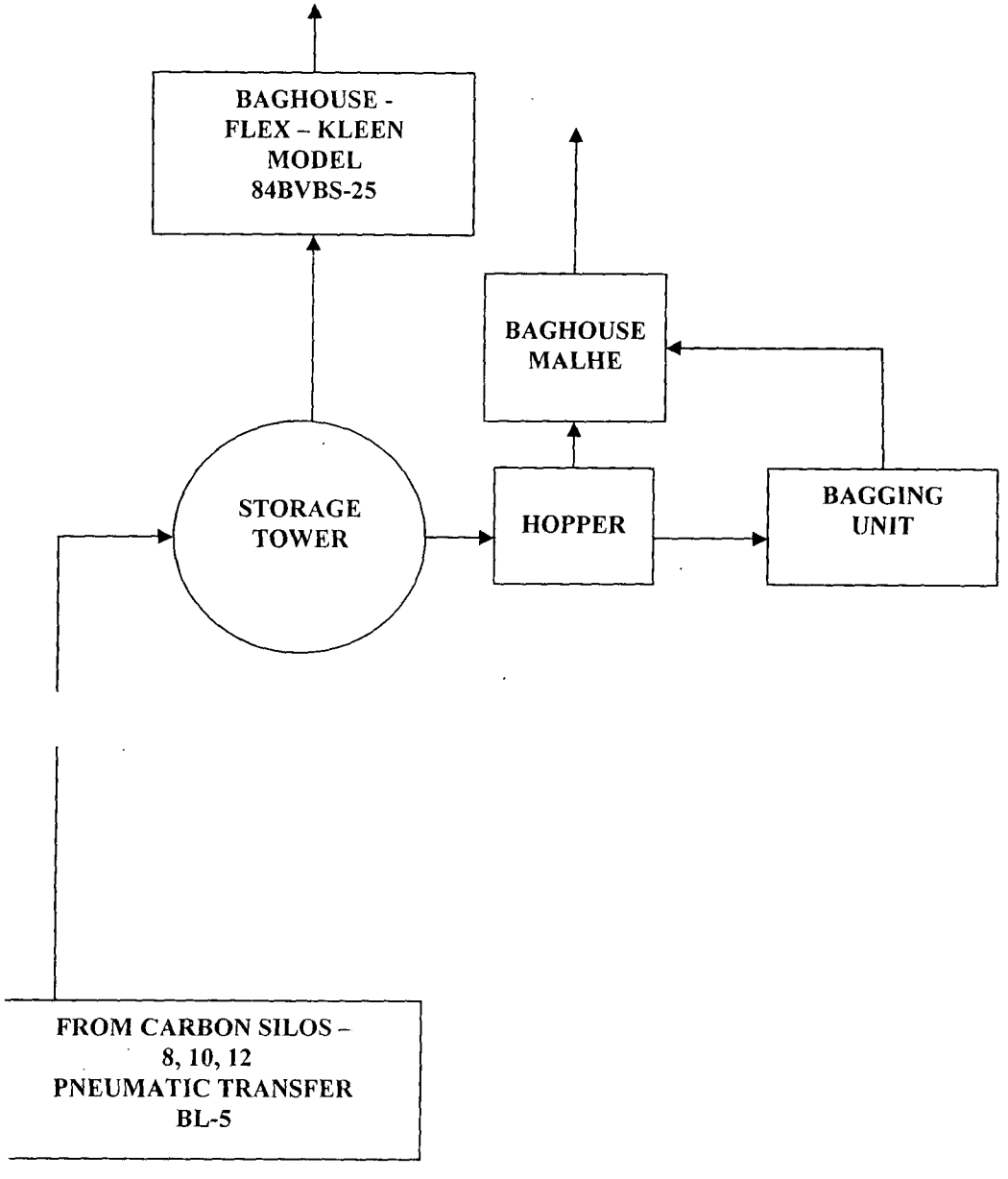
STANDARD CARBON LLC
KILNS No. 1 & 2 and
COMBUSTION CHAMBERS No. 1 & 2



STANDARD CARBON LLC
RAYMOND MILL GRINDING OPERATION



STANDARD CARBON LLC
BULK TRUCK/RAILCAR LOADING



STANDARD CARBON LLC
BAGGING SYSTEM –
1 TPH

NATURAL GAS EMISSIONS

STANDARD CARBON LLC
EMISSION FACTORS

FURNACE

Natural Gas: **SCC: 3-06-001-05**

PM =	3	lbs/MMCF x	MMCF x	Ton/2000 lb
SOx =	0.6	lbs/MMCF x	MMCF x	Tons/2000 lb
NOx =	140	lbs/MMCF x	MMCF x	Tons/2000 lb
VOC =	2.8	lbs/MMCF x	MMCF x	Tons/2000 lb
CO =	35	lbs/MMCF x	MMCF x	Tons/2000 lb

STANDARD CARBON LLC

KILN # 1 EMISSIONS - MCF

	MMCFH =	0.01048	
	HOURS =	8760	TOTAL
PM =	0.14		0.14
SOx =	0.03		0.03
NOx =	6.43		6.43
VOC =	0.13		0.13
CO =	1.61		1.61

KILN # 2 EMISSIONS - MCF

	MMCF =	0.0171	
	HOURS =	8760	
PM =	0.22		0.22
SOx =	0.04		0.04
NOx =	10.49		10.49
VOC =	0.21		0.21
CO =	2.62		2.62

PLANT TOTALS

	KILN #1	KILN #2	TOTAL
PM =	0.138	0.225	0.362
SOx =	0.028	0.045	0.072
NOx =	6.426	10.486	16.912
VOC =	0.129	0.210	0.338
CO =	1.607	2.621	4.228
MMCF =	91.80	149.80	241.60
MGal =	0.00	0.00	0.00

Zell, David

From: Kristine Switt [kswitt@standardpurification.com]
Sent: Monday, July 18, 2011 5:09 PM
To: Zell, David
Cc: ken@airtest.fdn.com
Subject: Burner ratings Standard Carbon

David,

The burner ratings get into some really technical jargon. I am not an expert at all with the gas system. However, after discussion with the manufacturer on the many variables, it was determined that the inputs could be slightly higher if we changed the air to fuel ratio to no excess air. The original values were based on a recommended 10% excess air.

These are Fives North American 4422-5 burners and the values were recalculated based on the full 16 OSIG (pressure) burner capacity shown in the burner literature, and no excess air.

For the two kilns, this would result in total inputs of:

Kiln 1: 21 burners = 21 x 905,000 btu/hr = 19.0 MMBtu/Hr

Kiln 2: 13 burners = 13 x 905,000 btu/hr = 11.8 MMBtu/Hr

Let me know if you need any more information.

Kristine Switt
V.P. of Operations
Standard Purification
O: 352.465.5959
Fax: 352.465.0679
kswitt@standardpurification.com
www.standardpurification.com

MEMORANDUM

TO: Permit File

FROM: David Zell
Air Permitting Engineer

DATE: 07/13/11

SUBJECT: Site Visit Report - Standard Carbon LLC
For Construction Permit **Project 0830170-004-AC**
Confirmation/Clarification of Requested Modification

On 07/12/11, I conducted a site visit of the Standard Carbon activated carbon production facility with Nedin Bahtic of the compliance section. The purpose for my visit was to clarify the changes being requested in the construction modification application I was processing (Project 0830170-004-AC), and get a better understanding of the facility equipment and process flow. The modification discussion and plant walk through was done with Kristine Switt, the plant manager (her title is V.P. of Operations). Ken Given, their consultant who prepared the permit application, also was there to conduct the annual visible emissions testing, which was ongoing during portions of our plant walk-through. Nedin was there to observe part of the visible emissions testing and conduct a facility inspection.

After my review of the construction permit application, I determined that the modifications requested in the application needed clarification and, in some cases, correction. All of requested modifications were discussed in detail with the plant manager and the facilities consultant during the plant visit. Following is a summary of the modifications being requested, as confirmed by the plant manager during this site visit.

- Increase maximum kiln combustion chamber fuel heat input rates from 8 MMBtu/hr to 18 (19) MMBtu/hr for Kiln No. 1, and from 8 MMBtu/hr to 11 (11.8) MMBtu/hr for Kiln No. 2, through blower modifications. See 7/18/11 email from K. Switt 7/19/11

  (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.)

- Replace existing Carbon Storage Silo Nos. 8, 10 and 13 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 an inactive EU (i.e., not being used 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. (The facility was informed that installation (and permitting) of ac baghouse emission control device for this activity will be required prior to any future operation of EU 003 (transfer of dry fly ash to Kiln flyash feed hoppers).)

- Modify the fly ash receiving/unloading area to receive and unload super sacks of powdered activated carbon (from combustion of coal). This powdered activated carbon will be pneumatically transferred to Fly Ash/Carbon Silo Nos. 9 or 11, or to Carbon Storage Silo Nos. 8, 10, or 12. This powdered activated carbon will be mixed with activated carbon (from fly ash from combustion or 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-4 (prev. PJ-4)) were already included in the facility PTE at maximum air flow rate for 8,760 hours/yr.)

  (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 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 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 and from the loading of truck or railcars from Carbon Storage Silo Nos. 14 and 16. 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 and the refurbished baghouse will control Carbon Storage Silo No. 16, 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.)