



07/11/2016

Ms. Beverly McKeone
Program Manager
Division of Air Quality
West Virginia Department of Environmental Protection
601 57th Street
Charleston, WV 25304, SE

**Re: NSR Class II Administrative Update and Title V Minor Modification to Modify
Material Handling Operations at the Kingsford Manufacturing Company
Parsons, WV Plant
Permit No. R13-1608G and R30-09300004-2014**

Dear Ms. McKeone:

Kingsford Manufacturing Company (KMC) owns and operates a charcoal briquet manufacturing facility located in Parsons, Tucker County, West Virginia. During KMC's maintenance outage starting September 3, 2016, KMC plans to replace one (1) existing screening operations (E-02-03) on their existing raw material handling system, remove the existing retort char surge bin (E-06-0G) and its associated fabric filter dust collector (C-33), install a pneumatic conveyor to transfer lime from the existing bulk lime unloading operation (EU-02-0E) to the existing bulk lime tank (EU-06-06) and replace an existing fabric filter (C-15) on the lime use tank (EU-06-09). KMC is requesting that the permit be revised through an NSR administrative update under Regulation 13 and as a minor modification under Regulation 30.

Screen Replacement

KMC currently operates a primary (E-02-02) and secondary (E-02-03) screen as part of their raw material handling operations. The screens are used to size the wood used as raw material in the char manufacturing process. No changes in its screening fractions are anticipated. The new secondary screening operations will continue to be designated E-02-03, the same Source ID number as the screen it is replacing. The new secondary screener will continue to use Emission Point ID number S-09. A process flow diagram for the raw material handling operation, shows both the existing and proposed operations, is provided in Attachment F. Potential emission calculations are provided in Attachment N.

Retort Char Surge Bin Removal

Retort Char Surge Bin (E-06-0G) and its associated fabric filter (C-33) will be removed. The surge bin was used to store retort char when the pneumatic conveying system to the retort char silos (E-06-05) was down. Instead, Kingsford intends to use closed mechanical conveyors to fill trucks when this condition occurs. The trucks will then be used to transport the char to the existing Beryl Char and Coal Unloading Operation (E-02-09). Because of the high moisture

Highway 21
PO Box 464
Parsons, WV
26287

(304) 478-2911
FAX: (304) 478-2129

content of the char being transferred, the amount of fugitive dust from the char transfer operations is negligible.

Lime Receipt and Transfer Modifications

Kingsford currently has two (2) methods of receiving lime. The first is by pneumatic truck. The second is by bulk truck. The pneumatic truck system allows lime to be blown directly from the truck to the bulk lime tank (EU-06-06), controlled by a bin vent filter (C-12) and then pneumatically conveyed to the lime use tank (EU-06-09, controlled by a bin vent filter C-15). The bulk truck unloading system (EU-02-0E, added in 2015) consists of receiving lime from covered trucks that back into an existing "shed" (three-sided roofed enclosure), and dumping the lime onto an open pad. The lime is then transferred from the resulting pile into a hopper using a front-end loader. The limestone is then transferred via covered conveyor systems to the existing charcoal briquet mixing process operations.

Kingsford would like the option of pneumatically conveying the bulk truck lime to the existing lime silo and then pneumatically conveying the lime to the existing use tank. This will require installation of a new pneumatic line and blower to convey the lime from the lime hopper to the lime silo, and replacement of the existing bin vent filter (C-15) on the lime use tank. The existing bin vent filter has an exhaust volumetric flowrate of 200 cfm. The new bin vent filter will have an exhaust volumetric flowrate of 600 cfm.

WVDEP applications forms and supporting information are attached for the proposed modifications to begin September 3, 2016. Once the permit application has been determined "administratively complete" we will pay the \$300 NSR Class II Administrative update fee by credit card. A Class I legal Advertisement will also be run at that time in a local newspaper and proof of publication will be submitted to WVDEP after it is received. If you have any questions or require any additional information, please feel free to contact Scott Stephenson, Plant Engineering Manager, at (304) 478-5529 or our environmental consultant, Gavin Biebuyck with Liberty Environmental at (610) 375-9301.

Very truly yours,

KINGSFORD MANUFACTURING COMPANY



Scott Stephenson
Plant Engineering Manager

cc: Carey Preston
Mike Young
Gavin Biebuyck – Liberty Environmental



Kingsford Manufacturing Company

Class II Administrative Update and Title V Minor Permit Revision for Product Handling Modifications at a Charcoal Manufacturing Facility

**Parsons, West Virginia
July 2016**

Submitted to:



**West Virginia DEP
Division of Air Quality
601 57th Street, SE
Charleston, WV 25304**

Prepared by:



**Liberty Environmental, Inc.
50 N. 5th Street, 5th Floor
Reading, PA 19601**

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**APPLICATION FOR CLASS II ADMINISTRATIVE UPDATE AND TITLE V
PERMIT REVISION**



WEST VIRGINIA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY

601 57th Street, SE
Charleston, WV 25304
(304) 926-0475
www.dep.wv.gov/daq

**APPLICATION FOR NSR PERMIT
AND
TITLE V PERMIT REVISION
(OPTIONAL)**

PLEASE CHECK ALL THAT APPLY TO **NSR (45CSR13)** (IF KNOWN):

- ☐ CONSTRUCTION ☐ MODIFICATION ☐ RELOCATION
☐ CLASS I ADMINISTRATIVE UPDATE ☐ TEMPORARY
☒ CLASS II ADMINISTRATIVE UPDATE ☐ AFTER-THE-FACT

PLEASE CHECK TYPE OF **45CSR30 (TITLE V)** REVISION (IF ANY):

- ☐ ADMINISTRATIVE AMENDMENT ☒ MINOR MODIFICATION
☐ SIGNIFICANT MODIFICATION

IF ANY BOX ABOVE IS CHECKED, INCLUDE TITLE V REVISION INFORMATION AS **ATTACHMENT S** TO THIS APPLICATION

FOR TITLE V FACILITIES ONLY: Please refer to "Title V Revision Guidance" in order to determine your Title V Revision options (Appendix A, "Title V Permit Revision Flowchart") and ability to operate with the changes requested in this Permit Application.

Section I. General

1. Name of applicant (as registered with the WV Secretary of State's Office): Kingsford Manufacturing Company		2. Federal Employer ID No. (FEIN): 943240524	
3. Name of facility (if different from above): Kingsford Manufacturing Company – Parsons Plant		4. The applicant is the: <input type="checkbox"/> OWNER <input type="checkbox"/> OPERATOR <input checked="" type="checkbox"/> BOTH	
5A. Applicant's mailing address: P.O Box 464 Parsons, WV 26287		5B. Facility's present physical address: Route 219, about 2 miles south of Parsons	
6. West Virginia Business Registration. Is the applicant a resident of the State of West Virginia? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO – If YES , provide a copy of the Certificate of Incorporation/Organization/Limited Partnership (one page) including any name change amendments or other Business Registration Certificate as Attachment A . – If NO , provide a copy of the Certificate of Authority/Authority of L.L.C./Registration (one page) including any name change amendments or other Business Certificate as Attachment A .			
7. If applicant is a subsidiary corporation, please provide the name of parent corporation: Clorox Corporation			
8. Does the applicant own, lease, have an option to buy or otherwise have control of the <i>proposed site</i> ? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO – If YES , please explain: Owner – If NO , you are not eligible for a permit for this source.			
9. Type of plant or facility (stationary source) to be constructed, modified, relocated, administratively updated or temporarily permitted (e.g., coal preparation plant, primary crusher, etc.): New wood screening operations and a fabric filter dust collector (baghouse) to be installed at a charcoal manufacturing plant		10. North American Industry Classification System (NAICS) code for the facility: 325191	
11A. DAQ Plant ID No. (for existing facilities only): 03-54-09300004		11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only): R30-09300004-2014, R13-1608G, R14-0001D, G60-C012A	

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

12A.

- For **Modifications, Administrative Updates or Temporary permits** at an existing facility, please provide directions to the *present location* of the facility from the nearest state road;
- For **Construction or Relocation permits**, please provide directions to the *proposed new site location* from the nearest state road. Include a **MAP** as **Attachment B**.

Route 219 North of Elkins. The plant is located about 2 miles South of Parsons on route 219.

12.B. New site address (if applicable):

12C. Nearest city or town:

Parsons, WV

12D. County:

Tucker

12.E. UTM Northing (KM): 4,326.20

12F. UTM Easting (KM): 613.20

12G. UTM Zone: 17

13. Briefly describe the proposed change(s) at the facility:

Kingsford Manufacturing Company (KMC) owns and operates a charcoal manufacturing facility located in Parsons, West Virginia. KMC plans to replace one (1) existing screening operations (E-02-03) on their existing raw material handling system, remove the existing retort char surge bin (E-06-0G) and its associated fabric filter dust collector (C-33), install a pneumatic conveyor to transfer lime from the existing bulk lime unloading operation (EU-02-0E) to the existing bulk lime tank (EU-06-06) and replace an existing fabric filter (C-15) on the lime use tank (EU-06-09).

14A. Provide the date of anticipated installation or change: Beginning September 3, 2016

- If this is an **After-The-Fact** permit application, provide the date upon which the proposed change did happen: / /

14B. Date of anticipated Start-Up if a permit is granted:

Beginning September 3, 2016

14C. Provide a **Schedule** of the planned **Installation of/Change** to and **Start-Up** of each of the units proposed in this permit application as **Attachment C** (if more than one unit is involved).

15. Provide maximum projected **Operating Schedule** of activity/activities outlined in this application:

Hours Per Day 24

Days Per Week 7

Weeks Per Year 52

16. Is demolition or physical renovation at an existing facility involved? ☒ **YES** ☐ **NO**

17. **Risk Management Plans.** If this facility is subject to 112(r) of the 1990 CAAA, or will become subject due to proposed changes (for applicability help see www.epa.gov/ceppo), submit your **Risk Management Plan (RMP)** to U. S. EPA Region III.

18. **Regulatory Discussion.** List all Federal and State air pollution control regulations that you believe are applicable to the proposed process (*if known*). A list of possible applicable requirements is also included in Attachment S of this application (Title V Permit Revision Information). Discuss applicability and proposed demonstration(s) of compliance (*if known*). Provide this information as **Attachment D**.

Section II. Additional attachments and supporting documents.

19. Include a check payable to WVDEP – Division of Air Quality with the appropriate **application fee** (per 45CSR22 and 45CSR13). \$300 fee for Class II Administrative Amendment included

20. Include a **Table of Contents** as the first page of your application package.

21. Provide a **Plot Plan**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is or is to be located as **Attachment E** (Refer to **Plot Plan Guidance**) .

- Indicate the location of the nearest occupied structure (e.g. church, school, business, residence).

22. Provide a **Detailed Process Flow Diagram(s)** showing each proposed or modified emissions unit, emission point and control device as **Attachment F**.

<p>23. Provide a Process Description as Attachment G.</p> <p style="margin-left: 20px;">– Also describe and quantify to the extent possible all changes made to the facility since the last permit review (if applicable).</p> <p><i>All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.</i></p>												
<p>24. Provide Material Safety Data Sheets (MSDS) for all materials processed, used or produced as Attachment H.</p> <p style="margin-left: 20px;">– For chemical processes, provide a MSDS for each compound emitted to the air.</p>												
<p>25. Fill out the Emission Units Table and provide it as Attachment I.</p>												
<p>26. Fill out the Emission Points Data Summary Sheet (Table 1 and Table 2) and provide it as Attachment J.</p>												
<p>27. Fill out the Fugitive Emissions Data Summary Sheet and provide it as Attachment K.</p>												
<p>28. Check all applicable Emissions Unit Data Sheets listed below:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;"><input type="checkbox"/> Bulk Liquid Transfer Operations</td> <td style="width: 33%;"><input type="checkbox"/> Haul Road Emissions</td> <td style="width: 33%;"><input type="checkbox"/> Quarry</td> </tr> <tr> <td><input type="checkbox"/> Chemical Processes</td> <td><input type="checkbox"/> Hot Mix Asphalt Plant</td> <td><input type="checkbox"/> Solid Materials Sizing, Handling and Storage Facilities</td> </tr> <tr> <td><input type="checkbox"/> Concrete Batch Plant</td> <td><input type="checkbox"/> Incinerator</td> <td><input type="checkbox"/> Storage Tanks</td> </tr> <tr> <td><input type="checkbox"/> Grey Iron and Steel Foundry</td> <td><input type="checkbox"/> Indirect Heat Exchanger</td> <td></td> </tr> </table> <p><input checked="" type="checkbox"/> General Emission Unit, specify:</p> <p>Kingsford Manufacturing Company (KMC) owns and operates a charcoal manufacturing facility located in Parsons, West Virginia. KMC plans to replace one (1) existing screening operations (E-02-03) on their existing raw material handling system, remove the existing retort char surge bin (E-06-0G) and its associated fabric filter dust collector (C-33), install a pneumatic conveyor to transfer lime from the existing bulk lime unloading operation (EU-02-0E) to the existing bulk lime tank (EU-06-06) and replace an existing fabric filter (C-15) on the lime use tank (EU-06-09).</p> <p>Fill out and provide the Emissions Unit Data Sheet(s) as Attachment L.</p>	<input type="checkbox"/> Bulk Liquid Transfer Operations	<input type="checkbox"/> Haul Road Emissions	<input type="checkbox"/> Quarry	<input type="checkbox"/> Chemical Processes	<input type="checkbox"/> Hot Mix Asphalt Plant	<input type="checkbox"/> Solid Materials Sizing, Handling and Storage Facilities	<input type="checkbox"/> Concrete Batch Plant	<input type="checkbox"/> Incinerator	<input type="checkbox"/> Storage Tanks	<input type="checkbox"/> Grey Iron and Steel Foundry	<input type="checkbox"/> Indirect Heat Exchanger	
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<input type="checkbox"/> Concrete Batch Plant	<input type="checkbox"/> Incinerator	<input type="checkbox"/> Storage Tanks										
<input type="checkbox"/> Grey Iron and Steel Foundry	<input type="checkbox"/> Indirect Heat Exchanger											
<p>29. Check all applicable Air Pollution Control Device Sheets listed below:</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;"><input type="checkbox"/> Absorption Systems</td> <td style="width: 33%;"><input checked="" type="checkbox"/> Baghouse</td> <td style="width: 33%;"><input type="checkbox"/> Flare</td> </tr> <tr> <td><input type="checkbox"/> Adsorption Systems</td> <td><input type="checkbox"/> Condenser</td> <td><input type="checkbox"/> Mechanical Collector</td> </tr> <tr> <td><input type="checkbox"/> Afterburner</td> <td><input type="checkbox"/> Electrostatic Precipitator</td> <td><input type="checkbox"/> Wet Collecting System</td> </tr> </table> <p><input type="checkbox"/> Other Collectors, specify</p> <p>Fill out and provide the Air Pollution Control Device Sheet(s) as Attachment M.</p>	<input type="checkbox"/> Absorption Systems	<input checked="" type="checkbox"/> Baghouse	<input type="checkbox"/> Flare	<input type="checkbox"/> Adsorption Systems	<input type="checkbox"/> Condenser	<input type="checkbox"/> Mechanical Collector	<input type="checkbox"/> Afterburner	<input type="checkbox"/> Electrostatic Precipitator	<input type="checkbox"/> Wet Collecting System			
<input type="checkbox"/> Absorption Systems	<input checked="" type="checkbox"/> Baghouse	<input type="checkbox"/> Flare										
<input type="checkbox"/> Adsorption Systems	<input type="checkbox"/> Condenser	<input type="checkbox"/> Mechanical Collector										
<input type="checkbox"/> Afterburner	<input type="checkbox"/> Electrostatic Precipitator	<input type="checkbox"/> Wet Collecting System										
<p>30. Provide all Supporting Emissions Calculations as Attachment N, or attach the calculations directly to the forms listed in Items 28 through 31.</p>												
<p>31. Monitoring, Recordkeeping, Reporting and Testing Plans. Attach proposed monitoring, recordkeeping, reporting and testing plans in order to demonstrate compliance with the proposed emissions limits and operating parameters in this permit application. Provide this information as Attachment O.</p> <p>➤ Please be aware that all permits must be practically enforceable whether or not the applicant chooses to propose such measures. Additionally, the DAQ may not be able to accept all measures proposed by the applicant. If none of these plans are proposed by the applicant, DAQ will develop such plans and include them in the permit.</p>												
<p>32. Public Notice. At the time that the application is submitted, place a Class I Legal Advertisement in a newspaper of general circulation in the area where the source is or will be located (See 45CSR§13-8.3 through 45CSR§13-8.5 and Example Legal Advertisement for details). Please submit the Affidavit of Publication as Attachment P immediately upon receipt.</p>												
<p>33. Business Confidentiality Claims. Does this application include confidential information (per 45CSR31)?</p> <p style="text-align: center;"><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO</p> <p>➤ If YES, identify each segment of information on each page that is submitted as confidential and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's "Precautionary Notice – Claims of Confidentiality" guidance found in the General Instructions as Attachment Q.</p>												

Section III. Certification of Information

34. Authority/Delegation of Authority. Only required when someone other than the responsible official signs the application. Check applicable **Authority Form** below:

- ☒ Authority of Corporation or Other Business Entity ☐ Authority of Partnership
☐ Authority of Governmental Agency ☐ Authority of Limited Partnership

Submit completed and signed **Authority Form** as **Attachment R**.

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

35A. Certification of Information. To certify this permit application, a Responsible Official (per 45CSR§13-2.22 and 45CSR§30-2.28) or Authorized Representative shall check the appropriate box and sign below.

Certification of Truth, Accuracy, and Completeness

I, the undersigned ☐ **Responsible Official** / ☒ **Authorized Representative**, hereby certify that all information contained in this application and any supporting documents appended hereto, is true, accurate, and complete based on information and belief after reasonable inquiry I further agree to assume responsibility for the construction, modification and/or relocation and operation of the stationary source described herein in accordance with this application and any amendments thereto, as well as the Department of Environmental Protection, Division of Air Quality permit issued in accordance with this application, along with all applicable rules and regulations of the West Virginia Division of Air Quality and W.Va. Code § 22-5-1 et seq. (State Air Pollution Control Act). If the business or agency changes its Responsible Official or Authorized Representative, the Director of the Division of Air Quality will be notified in writing within 30 days of the official change.

Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

SIGNATURE Scott Stephenson (for Carey Preston) DATE: 7/11/16
(Please use blue ink) (Please use blue ink)

35B. Printed name of signee: Carey Preston <u>Scott Stephenson (for Carey Preston)</u>		35C. Title: Plant Manager
35D. E-mail: carey.preston@clorox.com	36E. Phone: 304-478-2911	36F. FAX: 304-478-2129
36A. Printed name of contact person (if different from above): Scott Stephenson		36B. Title: Plant Engineering Manager
36C. E-mail: scott.stephenson@clorox.com	36D. Phone: 304-478-5529	36E. FAX: 304-478-2129

PLEASE CHECK ALL APPLICABLE ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Attachment A: Business Certificate
<input checked="" type="checkbox"/> Attachment B: Map(s)
<input checked="" type="checkbox"/> Attachment C: Installation and Start Up Schedule
<input checked="" type="checkbox"/> Attachment D: Regulatory Discussion
<input checked="" type="checkbox"/> Attachment E: Plot Plan
<input checked="" type="checkbox"/> Attachment F: Detailed Process Flow Diagram(s)
<input checked="" type="checkbox"/> Attachment G: Process Description
<input checked="" type="checkbox"/> Attachment H: Material Safety Data Sheets (MSDS)
<input checked="" type="checkbox"/> Attachment I: Emission Units Table
<input checked="" type="checkbox"/> Attachment J: Emission Points Data Summary Sheet | <input checked="" type="checkbox"/> Attachment K: Fugitive Emissions Data Summary Sheet
<input checked="" type="checkbox"/> Attachment L: Emissions Unit Data Sheet(s)
<input checked="" type="checkbox"/> Attachment M: Air Pollution Control Device Sheet(s)
<input checked="" type="checkbox"/> Attachment N: Supporting Emissions Calculations
<input type="checkbox"/> Attachment O: Monitoring/Recordkeeping/Reporting/Testing Plans
<input checked="" type="checkbox"/> Attachment P: Public Notice
<input type="checkbox"/> Attachment Q: Business Confidential Claims
<input checked="" type="checkbox"/> Attachment R: Authority Forms
<input checked="" type="checkbox"/> Attachment S: Title V Permit Revision Information
<input type="checkbox"/> Application Fee |
|---|--|

Please mail an original and three (3) copies of the complete permit application with the signature(s) to the DAQ, Permitting Section, at the address listed on the first page of this application. Please DO NOT fax permit applications.

FOR AGENCY USE ONLY – IF THIS IS A TITLE V SOURCE:

- ☐ *Forward 1 copy of the application to the Title V Permitting Group and:*
- ☐ *For Title V Administrative Amendments:*
 - ☐ *NSR permit writer should notify Title V permit writer of draft permit,*
- ☐ *For Title V Minor Modifications:*
 - ☐ *Title V permit writer should send appropriate notification to EPA and affected states within 5 days of receipt,*
 - ☐ *NSR permit writer should notify Title V permit writer of draft permit.*
- ☐ *For Title V Significant Modifications processed in parallel with NSR Permit revision:*
 - ☐ *NSR permit writer should notify a Title V permit writer of draft permit,*
 - ☐ *Public notice should reference both 45CSR13 and Title V permits,*
 - ☐ *EPA has 45 day review period of a draft permit.*

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

ATTACHMENT A
CURRENT BUSINESS CERTIFICATE

**WEST VIRGINIA
STATE TAX DEPARTMENT
BUSINESS REGISTRATION
CERTIFICATE**

ISSUED TO:
**KINGSFORD MANUFACTURING COMPANY
RT 219 SOUTH
PARSONS, WV 26287**

BUSINESS REGISTRATION ACCOUNT NUMBER: **1052-8044**

This certificate is issued on: 06/14/2010

*This certificate is issued by
the West Virginia State Tax Commissioner
in accordance with W.Va. Code § 11-12.*

*The person or organization identified on this certificate is registered
to conduct business in the State of West Virginia at the location above.*

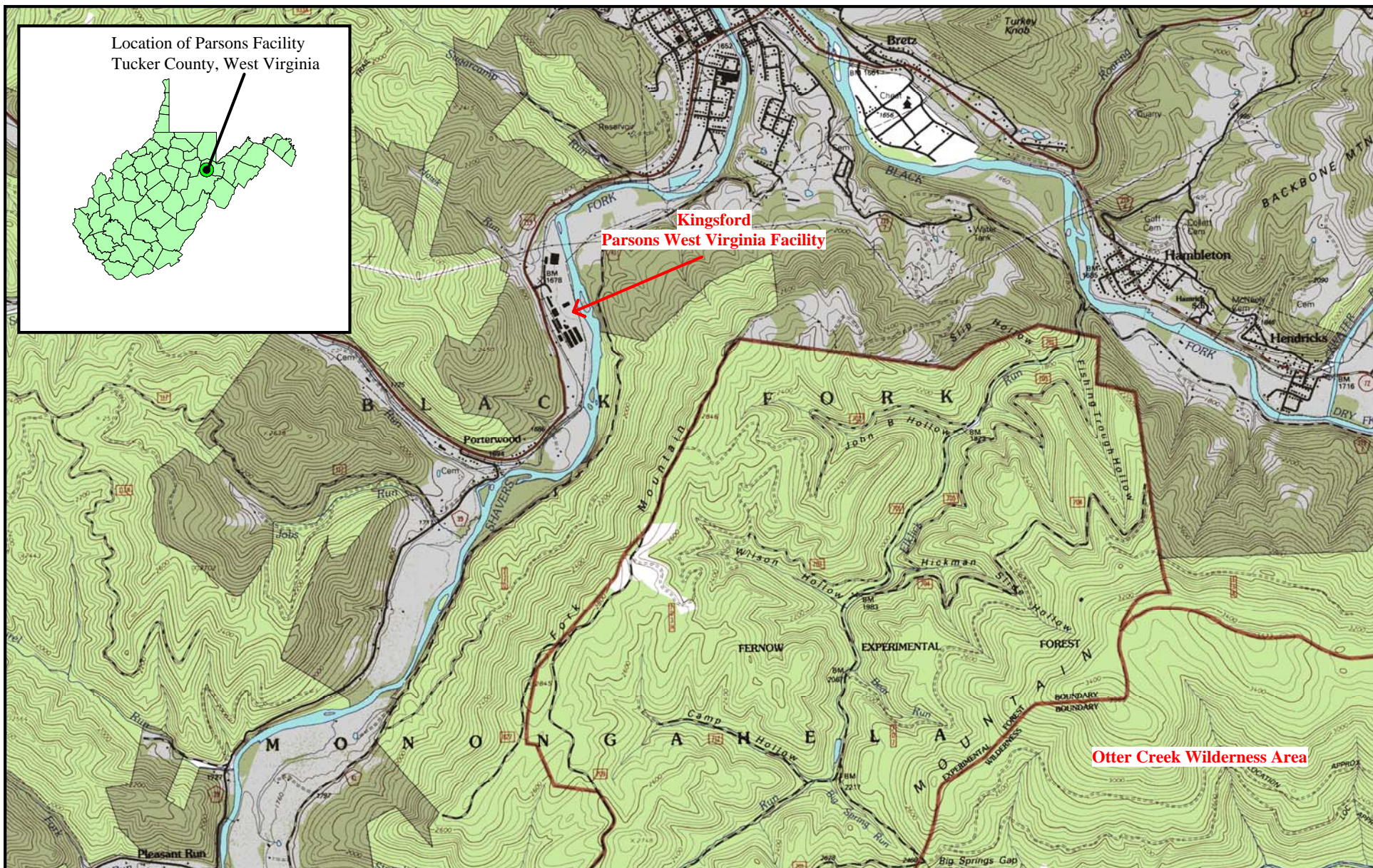
This certificate is not transferrable and must be displayed at the location for which issued.

This certificate shall be permanent until cessation of the business for which the certificate of registration was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

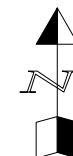
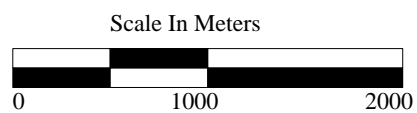
Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them.
CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of this certificate displayed at every job site within West Virginia.

ATTACHMENT B
AREA MAP



Attachment B
Kingsford Manufacturing Company
Parson, WV Facility



ATTACHMENT C
INSTALLATION AND STARTUP SCHEDULE

Attachment C
Installation/Startup Schedule
(includes all emission units and air pollution control devices
that will be part of this permit application review, regardless of permitting status)

Emission Unit ID ¹	Emission Point ID ²	Emission Unit Description	Date of Modification	Date of Startup	Type of Change	Control Device ³
Screen Replacement						
E-02-03	S-09	Secondary Screening	Beginning 9/3/2016	Beginning 9/3/2016	Replacement of Screen	None
Retort Char Surge Bin Removal						
E-06-0G	S-24	Retort Char Surge Bin	Beginning 9/3/2016	N/A	Removal of surge bin and fabric filter (C-33)	Fabric filter C-33
Lime Receipt and Transfer Operations						
E-02-0E	S-09	Bulk Lime Truck Unloading System	Beginning 9/3/2016	Beginning 9/3/2016	Installation of a new blower and pneumatic line to convey lime from the from the bulk lime truck unloading system to the bulk lime tank	Full enclosure
E-06-06	S-14	Bulk Lime Tank	Beginning 9/3/2016	Beginning 9/3/2016		Fabric filter C-12
E-06-09	S-17	Lime Use Tank	Beginning 9/3/2016	Beginning 9/3/2016	Fabric filter to be replaced	Fabric filter C-15
E-09-01	S-09	Paved Plant Roads	Beginning 9/3/2016	Beginning 9/3/2016	Slight increase in plant traffic due to Surge Char Truck Traffic	None

¹ For Emission Units (or Sources) use the following numbering system: 1S, 2S, 3S,... or other appropriate designation.

² For Emission Points use the following numbering system: 1E, 2E, 3E, ... or other appropriate designation.

³ For Control Devices use the following numbering system: 1C, 2C, 3C,... or other appropriate designation.

ATTACHMENT D
REGULATORY DISCUSSION

ATTACHMENT D – REGULATORY DISCUSSION

Screen Replacement

KMC currently operates a primary (E-02-02) and secondary (E-02-03) screen as part of their raw material handling operations. The screens are used to size the wood used as raw material in the char manufacturing process. KMC intends to replace the existing secondary screen with a new screen. KMC will continue to ensure compliance with the requirements of 45-CSR7 using the daily visible emission checks listed in Section 3.2 of Permit No. R30-09300004-2014. The screen is not equipped with control equipment so the provisions of the federal Compliance Assurance Monitoring (CAM) requirements of 40 CFR Part 64 are not applicable.

Retort Char Surge Bin Removal

Retort Char Surge Bin (E-06-0G) and its associated fabric filter (C-33) will be removed. The surge bin was used to store retort char when the pneumatic conveying system to the retort char silos (E-06-05) was down. Instead, Kingsford intends to use closed mechanical conveyors to fill trucks when this condition occurs. Due to the high moisture percentage of the char being transferred, the amount of fugitive dust from the char transfer operations is negligible. The Parsons Title V operating permit identifies applicable emissions limitations for the char tanks and transfer operations in section 8.0 of Permit No. R30-09300004-2014.

Lime Receipt and Transfer Modifications

Kingsford currently has two (2) methods of receiving lime. The first is by pneumatic truck. The second is by bulk truck. The pneumatic truck system allows lime to be blown directly from the truck to the bulk lime tank (EU-06-06, controlled by a bin vent filter C-12) and then pneumatically conveyed to the lime use tank (EU-06-09, controlled by a bin vent filter C-15). The bulk truck unloading system (EU-02-0E, added in 2015) consists of receiving lime from covered trucks that back into an existing “shed” (three-sided roofed enclosure), and dumping the lime onto an open pad. The lime is then transferred from the resulting pile into a hopper using a front-end loader. The limestone is then transferred via covered conveyor systems to the existing charcoal briquet mixing process operations.

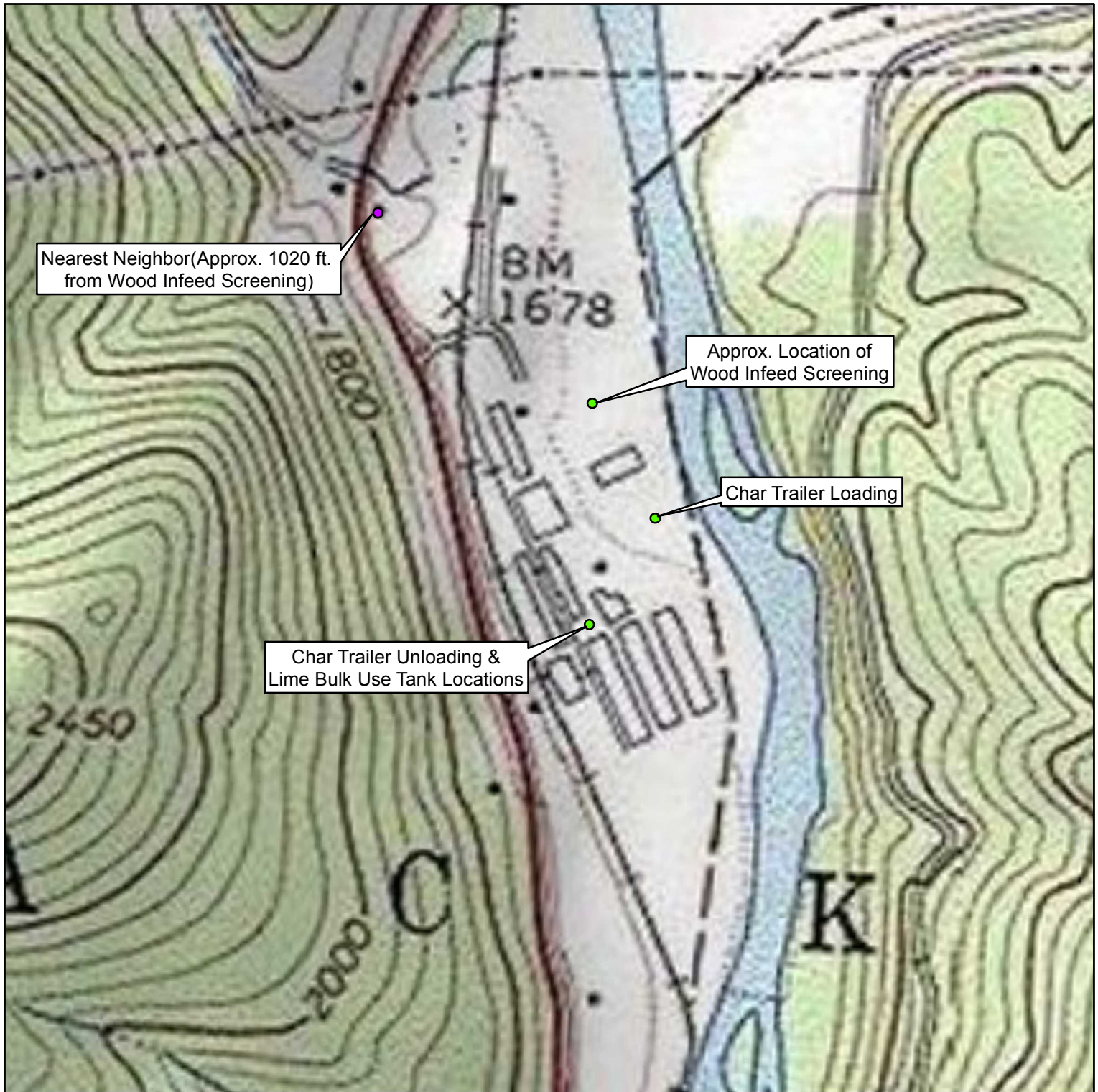
Kingsford would like the option of pneumatically conveying the bulk truck lime to the existing lime silo and then pneumatically conveying the lime to the existing use tank. This will require installation of a new pneumatic line and blower to convey the lime from the lime hopper to the lime silo, and replacement of the existing bin vent filter (C-15) on the lime use tank. The existing bin vent filter has an exhaust volumetric flowrate of 200 cfm. The new bin vent filter will have an exhaust volumetric flowrate of 600 cfm.

The Parsons Title V operating permit identifies applicable emissions limitations for the lime receipt and transfer operations in section 8.0 of Permit No. R30-09300004-2014.

Miscellaneous Regulations

Charcoal briquet manufacturing and handling operations are not subject to federal NSPS or NESHAP standards.

ATTACHMENT E
PLOT PLAN



SOURCE: USA TOPO MAPS - COPYRIGHT © 2013 NATIONAL GEOGRAPHIC SOCIETY, I-CUBED. PARSONS (1995), WEST VIRGINIA 7.5-MINUTE QUADRANGLE.

SCALE: 1" = 500'



50 N. Fifth St. 5th Floor
Reading, PA 19601
Phone: 610-375-9301
Fax: 610-375-9302
www.libertyenviro.com

Attachment E - Plot Plan

Kingsford Manufacturing Co.: Parsons Facility

US Route 219 South
Parons, Tucker County, West Virginia

PROJECT NO.: 160004

REV: 0

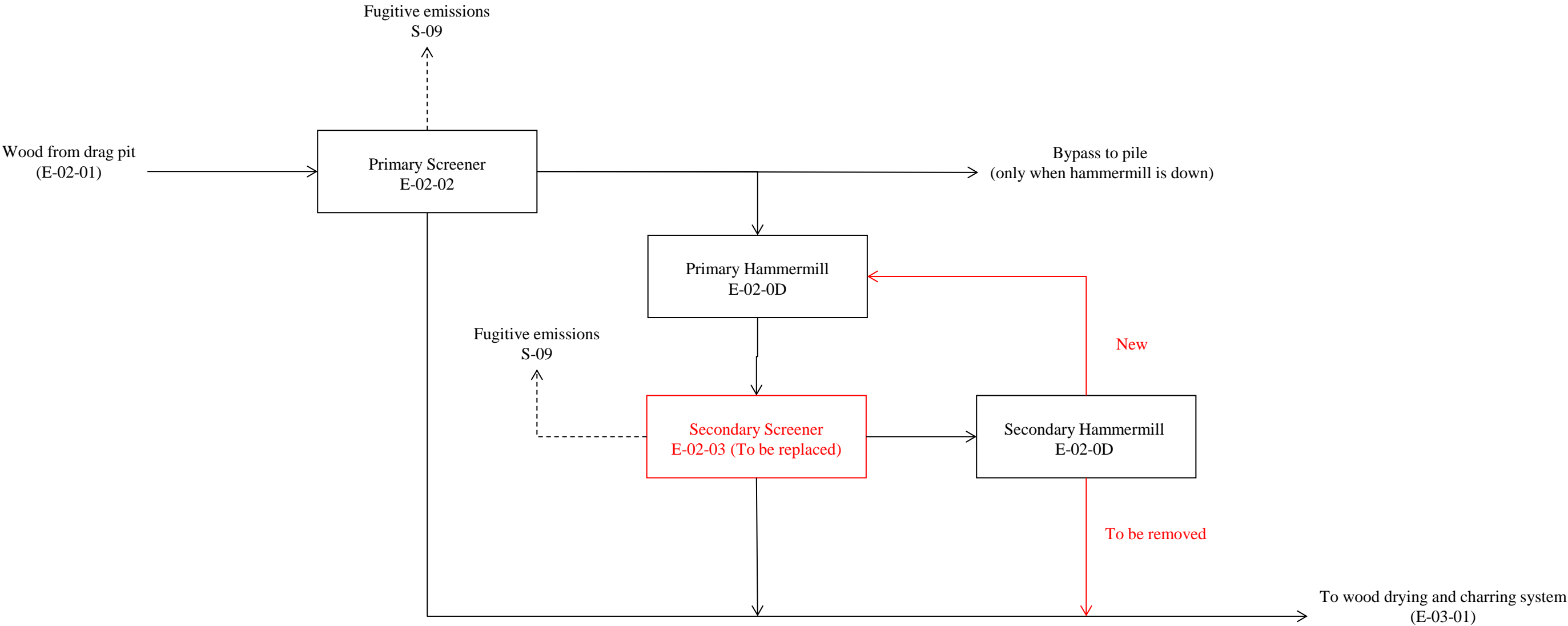
PREPARED BY: SJR

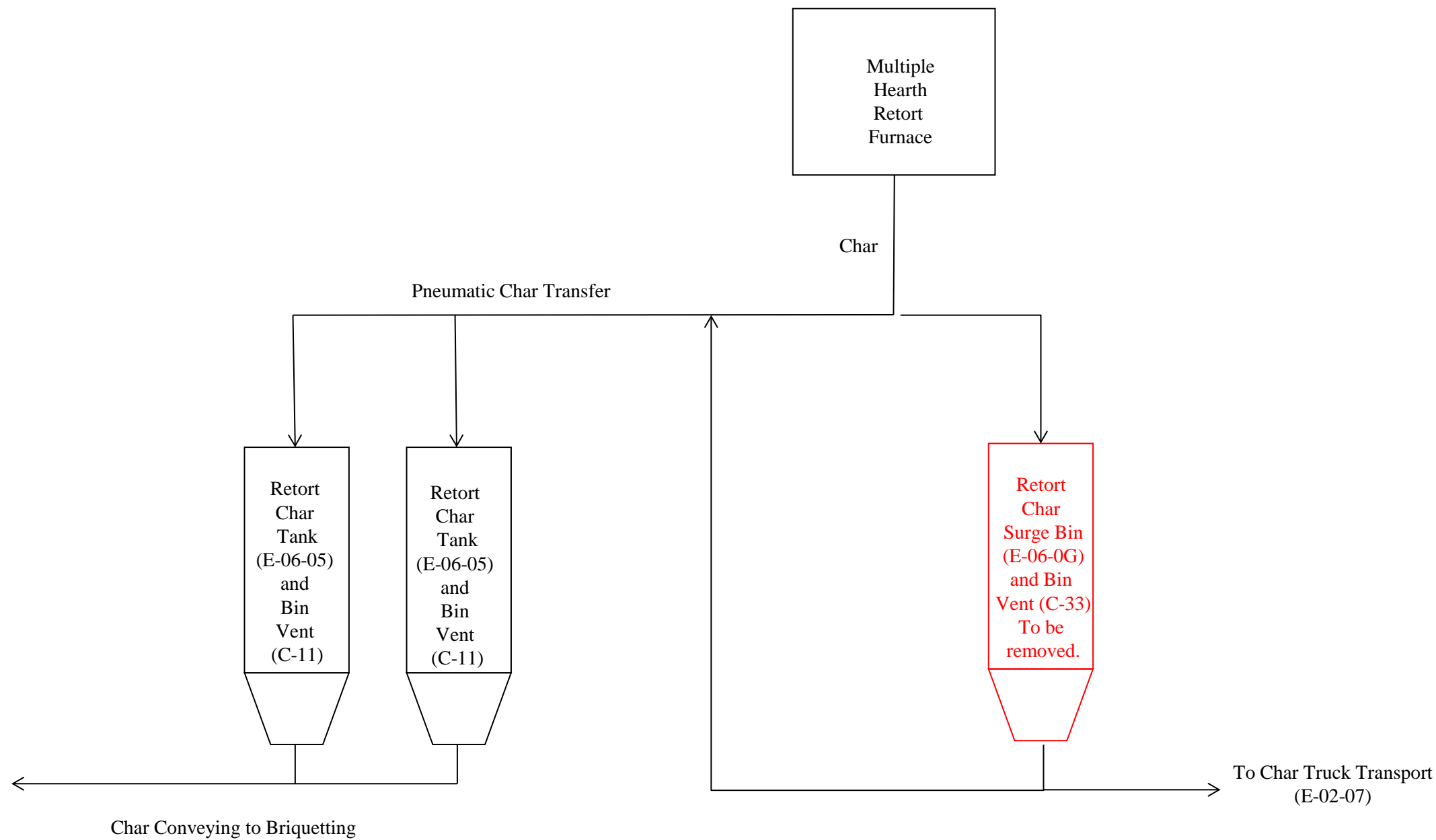
DATE: JULY 11, 2016

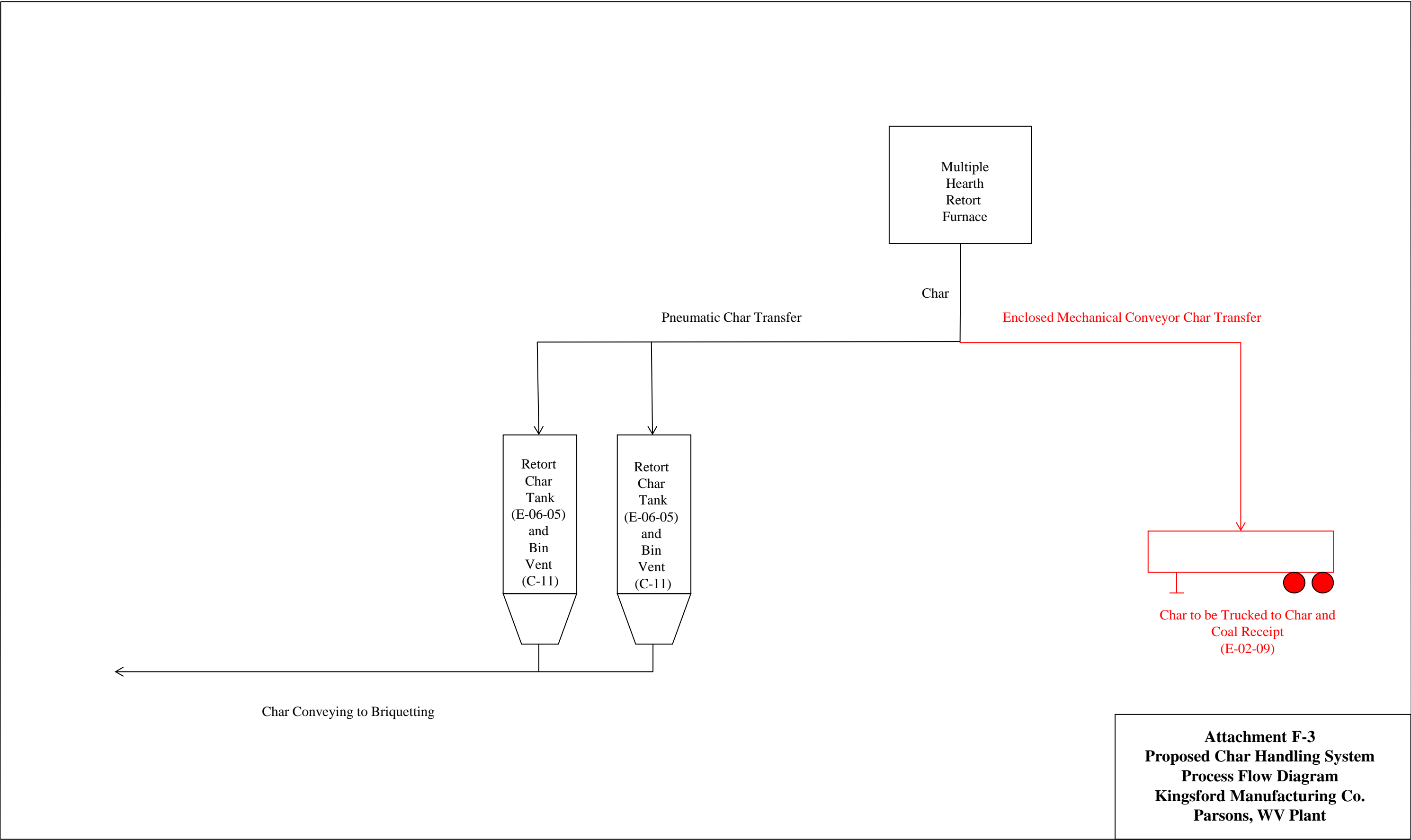
SCALE: 1" = 500'

APPROVED BY: MDZ

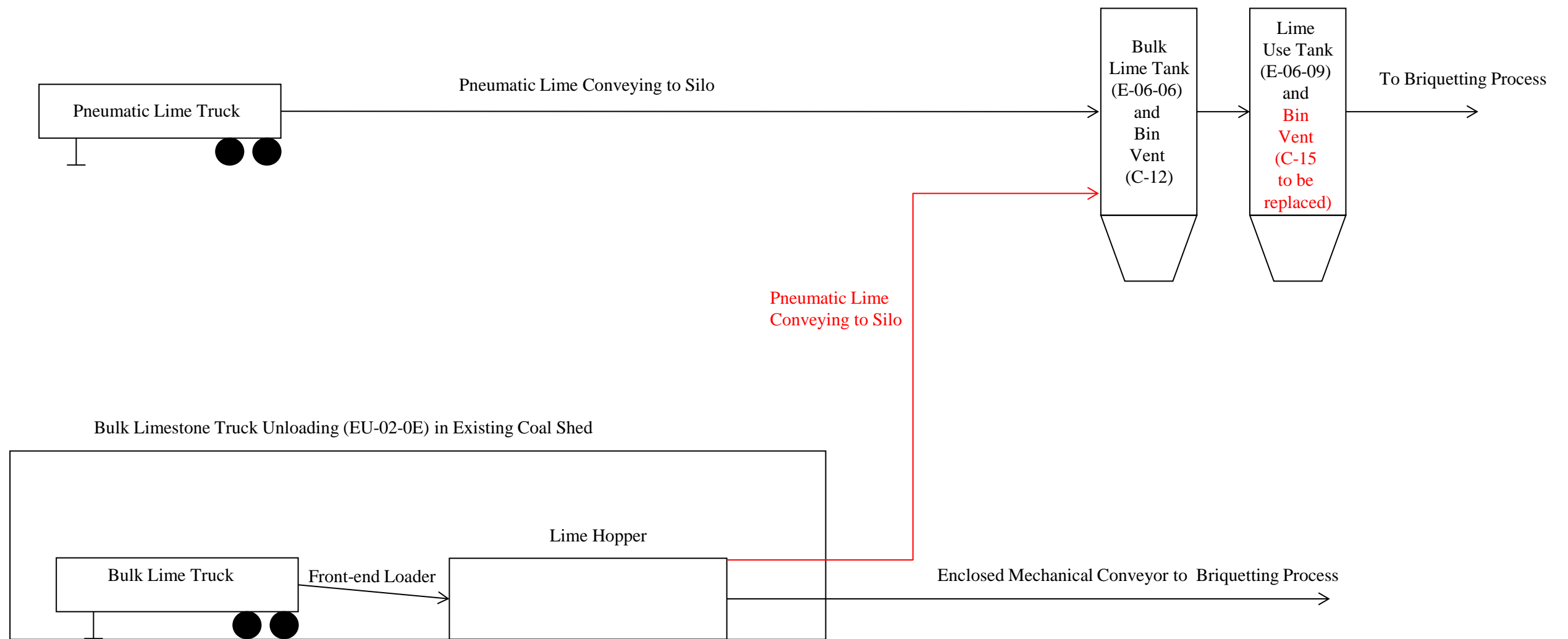
ATTACHMENT F
PROCESS FLOW DIAGRAM







Attachment F-3
Proposed Char Handling System
Process Flow Diagram
Kingsford Manufacturing Co.
Parsons, WV Plant



Attachment F-4
Proposed Lime Handling System
Process Flow Diagram
Kingsford Manufacturing Co.
Parsons, WV Plant

ATTACHMENT G
PROCESS DESCRIPTION

ATTACHMENT G – PROCESS DESCRIPTION

Kingsford Manufacturing Company (KMC) owns and operates a charcoal manufacturing facility located in Parsons, West Virginia. KMC plans to replace one (1) existing screening operations (E-02-03) on their existing raw material handling system, remove the existing retort char surge bin (E-06-0G) and its associated fabric filter dust collector (C-33), install a pneumatic conveyor to transfer lime from the existing bulk lime unloading operation (EU-02-0E) to the existing bulk lime tank (EU-06-06) and replace an existing fabric filter (C-15) on the lime use tank (EU-06-09). Additional details follow below.

Screen Replacement

KMC currently operates a primary (E-02-02) and secondary (E-02-03) screen as part of their raw material handling operations. The screens are used to size the wood used as raw material in the char manufacturing process. No changes in its screening fractions are anticipated. The new secondary screening operations will continue to be designated E-02-03, the same Source ID number as the screen it is replacing. The new secondary screener will continue to use Emission Point ID number S-09. A process flow diagram for the raw material handling operation, shows both the existing and proposed operations, is provided in Attachment F. Potential emission calculations are provided in Attachment N.

Retort Char Surge Bin Removal

Retort Char Surge Bin (E-06-0G) and its associated fabric filter (C-33) will be removed. The surge bin was used to store retort char when the pneumatic conveying system to the retort char silos (E-06-05) was down. Instead, Kingsford intends to use closed mechanical conveyors to fill trucks when this condition occurs. The trucks will then be used to transport the char to the existing Beryl Char and Coal Unloading Operation (E-02-09). Because of the high moisture content of the char being transferred, the amount of fugitive dust from the char transfer operations is negligible.

Lime Receipt and Transfer Modifications

Kingsford currently has two (2) methods of receiving lime. The first is by pneumatic truck. The second is by bulk truck. The pneumatic truck system allows lime to be blown directly from the truck to the bulk lime tank (EU-06-06), controlled by a bin vent filter C-12) and then pneumatically conveyed to the lime use tank (EU-06-09, controlled by a bin vent filter C-15). The bulk truck unloading system (EU-02-0E, added in 2015) consists of receiving lime from covered trucks that back into an existing “shed” (three-sided roofed enclosure), and dumping the lime onto an open pad. The lime is then transferred from the resulting pile into a hopper using a front-end loader. The limestone is then transferred via covered conveyor systems to the existing charcoal briquet mixing process operations.

Kingsford would like the option of pneumatically conveying the bulk truck lime to the existing lime silo and then pneumatically conveying the lime to the existing use tank. This will require installation of a new pneumatic line and blower to convey the lime from

the lime hopper to the lime silo, and replacement of the existing bin vent filter (C-15) on the lime use tank. The existing bin vent filter has an exhaust volumetric flowrate of 200 cfm. The new bin vent filter will have an exhaust volumetric flowrate of 600 cfm.

Emissions from the proposed modifications are shown in Attachment N. The emissions are below the permitting thresholds of 45CSR13 for construction permits.

ATTACHMENT H
MSDS INFORMATION



The Clorox Company
7200 Johnson Drive
Pleasanton, California 94566
Tel. (415) 847-6100

Material Safety Data Sheet

I Chemical Identification														
NAME: SLAB WOOD DUST		CAS no. N/A												
DESCRIPTION: FINE PARTICLES OF WOOD		RTECS no. N/A												
Other Designations		Manufacturer												
Emergency Procedure														
Sawdust Wood Flour Hog Fuel Dust	Several Suppliers	Notify your Supervisor Call: (303) 573-1014 Rocky Mountain Poison Center 645 Barnock Street Denver, CO 80204-4307												
II Health Hazard Data		III Hazardous Ingredients												
<p>Irritating to the eyes, skin and respiratory tract. Possible sensitizer. Inhalation may produce asthma, cough, congestion, itching and bleeding of the nose and sneezing.</p> <p>FIRST AID: <u>EYE CONTACT:</u> flush immediately with water for at least 15 minutes. See a doctor if irritation persists.</p> <p><u>SKIN CONTACT:</u> low hazard. <u>INGESTION:</u> low hazard. Drink 2 to 3 glasses of water. <u>INHALATION:</u> remove from exposure. If breathing problems develop, give moist oxygen. Preliminary studies have linked wood dust to nasal cancer in furniture workers. Carpenters, sawmill and lumber mill workers do not appear to have this increased risk.</p>		<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Ingredient</th> <th style="text-align: left;">Concentration</th> <th style="text-align: left;">Worker Exposure Limit</th> </tr> </thead> <tbody> <tr> <td>Wood dust</td> <td>varies</td> <td></td> </tr> <tr> <td>hard wood</td> <td></td> <td>1 mg/m³ TWA</td> </tr> <tr> <td>soft wood</td> <td></td> <td>5mg/m³ TWA; 10mg/m³ STEL</td> </tr> </tbody> </table> <p>TWA = Time Weighted Average. Exposure should not be exceeded when averaged over a normal 8-hour workday and 40-hour workweek. Source: ACGIH, 1984.</p> <p>STEL = Short Term Exposure Level. Exposure must not exceed the stated limit during the allowable 15 minute excursion period. Source: ACGIH, 1984.</p> <p>Preliminary studies have linked wood dust to nasal cancer in furniture workers. Carpenters, sawmill and lumber mill workers do not appear to have this increased risk.</p>	Ingredient	Concentration	Worker Exposure Limit	Wood dust	varies		hard wood		1 mg/m ³ TWA	soft wood		5mg/m ³ TWA; 10mg/m ³ STEL
Ingredient	Concentration	Worker Exposure Limit												
Wood dust	varies													
hard wood		1 mg/m ³ TWA												
soft wood		5mg/m ³ TWA; 10mg/m ³ STEL												
IV Fire and Explosion Data		V Special Protection Information												
<p>As with all organic dusts, may be explosive if mixed with air in critical proportions. Minimize dust by maintaining good housekeeping. Extinguishing media: water, carbon dioxide. When fighting a fire wear an approved respirator, fire resistant clothing and eye protection.</p>		<p>Ventilation is recommended to keep the wood dust in the workroom air below 1 mg/m³. The following special protection equipment may be required depending upon your specific exposure and working conditions: hat, chemical splash goggles with sideshields or face shield, apron or coveralls, gloves, closed shoes and an approved respirator. See your supervisor or corporate safety for specific information.</p>												
VI Spill or Leak Procedures		VII Reactivity Data												
<p>When cleaning a spill or leak wear an approved respirator and suitable protective clothing and eye protection to prevent skin and eye contact. Minimize mixture with air. Nonhazardous. Scoop up and dispose of in accordance with local, state and federal regulations.</p>		<p>Stable. Incompatible with oxidizers (peroxides, perchlorates, hypochlorite, perborates).</p>												
VIII Special Precautions		IX Physical Data												
<p>Minimize skin and eye contact. Avoid inhalation.</p>		<p>None.</p>												

**The Clorox Company**

1221 Broadway
Oakland, CA 94612
Tel. (510) 271-7000

Material Safety Data Sheet

I Product: RAW CHAR								
Description: BLACK PARTICULATE SOLID								
Other Designations	Manufacturer	Emergency Telephone Nos.						
WOOD CHAR	Kingsford Manufacturing Company 1221 Broadway Oakland, CA 94612	For Medical Emergencies, call Rocky Mountain Poison Center: 1-800-446-1014 For Transportation Emergencies, call Chemtrec: 1-800-424-9300						
II Health Hazard Data		III Hazardous Ingredients						
<p>Dust may irritate eyes. Inhalation of dust may irritate nose and throat. Chronic or prolonged exposure to the dust may cause coughing and shortness of breath.</p> <p>Individuals with pulmonary and/or respiratory disease should avoid exposure to dust.</p> <p><u>FIRST AID:</u></p> <p><u>EYE CONTACT:</u> Flush eyes thoroughly with water for at least 15 minutes. If irritation persists, call a physician.</p> <p><u>SKIN CONTACT:</u> Wash skin with soap and water.</p> <p><u>INGESTION:</u> Drink a glassful of water. Call a physician.</p> <p><u>INHALATION:</u> Remove to fresh air. If irritation or breathing problems persist, call a physician.</p>		<table><thead><tr><th><u>Ingredient</u></th><th><u>Concentration</u></th><th><u>Worker Exposure Limit</u></th></tr></thead><tbody><tr><td>Char dust CAS # 16291-96-6</td><td>varies</td><td>2 mg/m³ - TLV-TWA^{a,b} (respirable dust)</td></tr></tbody></table> <p>^aTLV-TWA = ACGIH Threshold Limit Value-Time Weighted Average.</p> <p>^bBased on the ACGIH TLV-TWA for coal dust.</p> <p>None of the materials in this product are on the IARC, OSHA, or NTP carcinogen lists.</p>	<u>Ingredient</u>	<u>Concentration</u>	<u>Worker Exposure Limit</u>	Char dust CAS # 16291-96-6	varies	2 mg/m ³ - TLV-TWA ^{a,b} (respirable dust)
<u>Ingredient</u>	<u>Concentration</u>	<u>Worker Exposure Limit</u>						
Char dust CAS # 16291-96-6	varies	2 mg/m ³ - TLV-TWA ^{a,b} (respirable dust)						
IV Special Protection and Precautions		V Transportation and Regulatory Data						
<p><u>Hygienic Practices:</u> Wash hands after direct contact.</p> <p><u>Engineering Controls:</u> Use local exhaust to minimize exposure to dust.</p> <p><u>Personal Protective Equipment:</u> Wear safety glasses and gloves. Use NIOSH-approved respirator under conditions where TLV limits may be exceeded.</p>		<p><u>DOT Proper Shipping Name:</u> Spontaneously combustible material.</p> <p><u>EPA - SARA Title III/CERCLA:</u> This product is a hazardous chemical reportable under Sections 311/312 and contains no chemicals regulated under Section 313 or under Section 304/CERCLA.</p>						
VI Spill Procedures/Waste Disposal		VII Reactivity Data						
<p><u>Spill Procedures:</u> Remove heat and ignition sources. Vacuum sweep, if necessary, to avoid generating airborne dust. Wash residual to on-site treatment area, where appropriate.</p> <p><u>Waste Disposal:</u> Reclaim, if possible; otherwise, dispose of in accordance with all applicable federal, state, and local regulations.</p>		<p>Stable under normal use and storage conditions.</p> <p>Avoid contact with oxidizing agents, heat sources, and ignition sources.</p>						
VIII Fire and Explosion Data		IX Physical Data						
<p><u>Explosion Hazard:</u> Mixtures of fine particles with air may form a potentially explosive mixture.</p> <p><u>Fire Extinguishing Agents:</u> Dry chemical, carbon dioxide (CO₂), foam, or water spray.</p>		<p>Bulk density.....~0.5 g/mL</p>						

Material Safety Data Sheet

(Limestone)

1. IDENTIFICATION

Chemical Name:	Limestone	Chemical Formula:	N/A
Molecular Weight:	N/A	Trade Name:	Crushed Stone
DOT Identification No:	None		

Synonyms: Aggregate, Aglime, Barn Lime, Coverstone, Flexible Base, Fluxing Agent, Manufactured Sand, Mineral Filler, Screenings

2. PRODUCT AND COMPONENT DATA

Component(s) Chemical Name	CAS Registry No.	% (Approx)	Exposure Limits
Limestone*	1317-65-3	100	See section 6
*Composition varies naturally – typically contains quartz (crystalline silica).	14808-60-7	>1	

3. PHYSICAL DATA

Appearance and odor: Angular gray, white and tan particles ranging in size from powder to boulders. No odor.

Specific Gravity: 2.6 – 2.75

Boiling point (At 1 Atm.): N/A

Vapor Density in Air (Air = 1): N/A

Vapor Pressure (mmHg @ 20°C): N/A

% Volatile, By Volume (@ 100°F): 0%

Evaporation Rate (at 1 Atm. and 25°C; n-butyl acetate = 1): 0

Solubility in Water: 0

4. REACTIVITY DATA

Stability: Stable

Conditions to Avoid: Avoid contact with incompatible materials (see below).

Incompatibility (materials to avoid): Contact with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride may cause fire and/or explosions. Silica dissolves readily in hydrofluoric acid producing a corrosive gas – silicon tetrafluoride.

Hazardous Decomposition Products: Limestone ignites on contact with fluorine and is incompatible with acids, alum, ammonium salts, and magnesium. Silica reacts violently with powerful oxidizing agents such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride, and oxygen difluoride yielding possible fire and/or explosions. Silica dissolves readily in hydrofluoric acid producing a corrosive gas – silicon tetrafluoride.

Hazardous Polymerization: Not known to polymerize

5. FIRE AND EXPLOSION HAZARD DATA

Flashpoint (Method used): Not Flammable

Flammable Limits in Air: Not Flammable

Extinguishing Agents: None Required

Unusual Fire and Explosion Hazards: Contact with powerful oxidizing agents may cause fire and/or explosions (see section 4 of this MSDS).

6. TOXICITY AND FIRST AID

EXPOSURE LIMITS (When exposure to this product and other chemicals is concurrent, the exposure limit must be defined in the workplace.) Unless specified otherwise, limits are expressed as eight-hour time-weighted averages (TWA). Limits for cristobalite and tridymite (other forms of crystalline silica) are equal to one-half of the limits for quartz.

ABBREVIATIONS: TLV = threshold limit value of the American Conference of Governmental Industrial Hygienists (ACGIH); MSHA PEL = permissible exposure limit of the Mine Safety and Health Administration

(MSHA); OSHA PEL = permissible exposure limit of the Occupational Safety and Health Administration (OSHA); mg/m³ = milligrams of substance per cubic meter of air.

Limestone (Calcium Carbonate): ACGIH TLV® = 10mg/m³; OSHA PEL = 15mg/m³ (total dust); OSHA PEL = 5mg/m³ (respirable fraction), MSHA PEL = 10mg/m³ (total dust).

Other Particulates: 2001 ACGIH TLV® = 10mg/m³ (inhalable/total particulate, not otherwise specified), 2001 ACGIH TLV® = 3 mg/m³ (respirable particulate, not otherwise specified); OSHA PEL = 15mg/m³ (total particulate, not otherwise regulated), OSHA PEL = 5mg/m³ (respirable particulate, not otherwise regulated).

Respirable Crystalline Silica (SiO₂/quartz): ACGIH TLV® = 0.05mg/m³; MSHA and OSHA PEL = 10mg/m³ ÷ (%SiO₂+2), for respirable dust containing crystalline silica.

Total dust, respirable and nonrespirable: 1973 ACGIH TLV® = 30mg/m³ ÷ (%quartz + 3).

Total Dust: MSHA PEL = 10 mg/m³ (for nuisance particulates listed in Appendix E of the 1973 ACGIH TLV® booklet).

Per ACGIH, adverse effects are not likely to occur in the workplace provided exposure levels do not exceed the appropriate TLVs & PELs. However, because of the wide variation in individual susceptibility, lower exposure limits may be appropriate for some individuals including persons with pre-existing medical conditions such as those described below.

Medical Conditions Aggravated by Exposure: Inhaling respirable dust and/or crystalline silica may aggravate existing respiratory system disease(s) and/or dysfunctions. Exposure to dust may aggravate existing skin and/or eye conditions.

Primary Route(s) of Exposure

☒ Inhalation ☐ Skin ☐ Ingestion

Acute Toxicity

EYE CONTACT: Direct contact with dust may cause irritation by mechanical abrasion.

SKIN CONTACT: Direct contact may cause irritation by mechanical abrasion.

SKIN ABSORPTION: Not expected to be a significant exposure route.

INGESTION: Expected to be practically non-toxic. Ingestion of large amounts may cause gastrointestinal irritation and blockage.

INHALATION: Dusts may irritate the nose, throat, and respiratory tract by mechanical abrasion. Coughing, sneezing, and shortness of breath may occur following exposures in excess of appropriate exposure limits.

First Aid

EYES: Immediately flush eye(s) with plenty of clean water for at least 15 minutes, while holding the eyelids open. Occasionally lift the eyelids to ensure thorough rinsing. Beyond flushing, do not attempt to remove material from the eye(s). Contact a physician if irritation persists or later develops.

SKIN: Wash with soap and water. Contact a physician if irritation persists or later develops.

INGESTION: If person is conscious, give large quantity of water and induce vomiting; however, never attempt to make an unconscious person drink or vomit. Get immediate medical attention.

INHALATION: Move to fresh air. Dust in throat and nasal passages should clear spontaneously. Contact a physician if irritation persists or later develops.

Steve Sherrard 304-614-3171
For emergencies, contact Tyler Beaty 304-614-2986
(company's designated emergency contact)

Chronic Toxicity

Prolonged and repeated inhalation of respirable crystalline silica-containing dust in excess of appropriate exposure limits has caused silicosis, a lung disease. Not all individuals with silicosis will exhibit symptoms (signs) of the disease. However, silicosis can be progressive, and symptoms can appear at any time, even years

after exposure has ceased. Symptoms of silicosis may include, but are not limited to, the following: shortness of breath; difficulty breathing with or without exertion; coughing; diminished work capacity; diminished chest expansion; reduction of lung volume; right heart enlargement and/or failure. Smoking may increase the risk of developing lung disorders, including emphysema and lung cancer. Persons with silicosis have an increased risk of pulmonary tuberculosis infection.

Respirable dust containing newly broken silica particles has been shown to be more hazardous to animals in laboratory tests than respirable dust containing older silica particles of similar size. Respirable silica particles which had aged for sixty days or more showed less lung injury in animals than equal exposures of respirable dust containing newly broken particles of silica.

There are reports in the literature suggesting that excessive crystalline silica exposure may be associated with adverse health effects involving the kidney, scleroderma (thickening of the skin caused by swelling and thickening of fibrous tissue) and other autoimmune disorders. However, this evidence has been obtained primarily from case reports involving individuals working in high exposure situations or those who have already developed silicosis; and therefore, this evidence does not conclusively prove a causal relationship between silica or silicosis and these adverse health effects. Several studies of persons with silicosis also indicate an increased risk of developing lung cancer, a risk that increases with the duration of exposure. Some of these studies of silicotics do not account for lung cancer confounders, especially smoking.

Limestone is not listed as a carcinogen by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or the Occupational Safety and Health Administration (OSHA). In October 1996, an IARC Working Group re-assessing crystalline silica, a component of this product, designated respirable crystalline silica as carcinogenic (Group 1). The NTP's Report on Carcinogens, 9th edition, lists respirable crystalline silica as a "known human carcinogen." In year 2000, the American Conference of Governmental Industrial Hygienists (ACGIH) listed respirable crystalline silica (quartz) as a suspected human carcinogen (A-2). These classifications are based on sufficient evidence of carcinogenicity in certain experimental animals and on selected epidemiological studies of workers exposed to crystalline silica.

California Proposition 65: WARNING: This product contains chemical(s) known to the state of California to cause cancer.

7. PERSONAL PROTECTION AND CONTROLS

Respiratory Protection

For respirable quartz levels that exceed or are likely to exceed an 8-hr TWA of $0.1\text{mg}/\text{m}^3$, a NIOSH approved dust respirator is recommended. For respirable quartz levels that exceed or are likely to exceed an 8-hr TWA of $0.5\text{mg}/\text{m}^3$, a NIOSH approved HEPA filter respirator is recommended. If respirable quartz levels exceed or are likely to exceed an 8-hr TWA of $5\text{mg}/\text{m}^3$, a NIOSH approved positive pressure, full face respirator or equivalent is recommended. Respirator use must comply with applicable MSHA or OSHA standards, which include provisions for a user training program, respirator repair and cleaning, respirator fit testing, and other requirements.

Ventilation: Local exhaust or general ventilation adequate to maintain exposures below appropriate exposure limits.

Skin Protection

See "Hygiene" section below.

Eye Protection

Safety glasses with side shields should be worn as minimum protection. Dust goggles should be worn when excessively (visible) dusty conditions are present or are anticipated.

Hygiene

Wash dust-exposed skin with soap and water before eating, drinking, smoking, and using toilet facilities. Wash work clothes after each use.

Other Control Measures

Respirable dust and quartz levels should be monitored regularly. Dust and quartz levels in excess of appropriate exposure limits should be reduced by all feasible engineering controls, including (but not limited to) wet suppression, ventilation, process enclosure, and enclosed employee work stations.

8. STORAGE AND HANDLING PRECAUTIONS

Respirable crystalline silica-containing dust may be generated during processing, handling, and storage. The personal protection and controls identified in Section 7 of the MSDS should be used as appropriate.

Do not store near food and beverages or smoking material.

9. SPILL, LEAK AND DISPOSAL PRACTICES**STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED**

The personal protection and controls identified in Section 7 of the MSDS should be used as appropriate. Spilled material, where dust can be generated, may overexpose cleanup personnel to respirable crystalline silica-containing dust. Wetting of spilled material and/or use of respiratory protective equipment may be necessary. Do not dry sweep spilled material. Prevent spilled materials from inadvertently entering streams, drains, or sewers.

Steve Sherrard 304-614-3171

For emergencies, contact Tyler Beaty 304-614-2986
(your company's designated emergency contact)

WASTE DISPOSAL METHOD

Pick up and reuse clean materials. Dispose of waste materials only in accordance with applicable federal, state, and local laws and regulations.

10. TRANSPORTATION

DOT Hazard Classification: None

Placard Required: None

Label Required: Label as required by the OSHA Hazard Communication Standard [29 CFR 1910.1200 (f) and applicable state and local laws and regulations.

For Further Information Contact: Place here the name, address, and telephone number of the operator or responsible party who can provide more info about the hazardous chemical.

Date of Preparation:

Emergency Information: Your company's designated emergency contact.

Notice: JF Allen Company believes the information contained herein is accurate; however, JF Allen Company makes no guarantees with respect to such accuracy and assumes no liability in connection with the use of the information contained herein by any party. The provision of the information contained herein is not intended to be and should not be construed as legal advice or as ensuring compliance with any federal, state or local laws and regulations. Any party using this product should review all such laws, rules or regulations prior to use.

NO WARRANTY IS MADE, EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE.

ATTACHMENT I
EMISSION UNITS TABLE

(includes all emission units and air pollution control devices that will be part of this permit application review, regardless of permitting status)

¹ For Emission Units (or Sources) use the following numbering system: 1S, 2S, 3S,... or other appropriate designation.
² For Emission Points use the following numbering system: 1E, 2E, 3E, ... or other appropriate designation.
³ New, modification, removal
⁴ For Control Devices use the following numbering system: 1C, 2C, 3C,... or other appropriate designation.

ATTACHMENT J
EMISSION POINTS DATA SUMMARY SHEET

Attachment J

EMISSION POINTS DATA SUMMARY SHEET

Table 1: Emissions Data															
Emission Point ID No. <i>(Must match Emission Units Table & Plot Plan)</i>	Emission Point Type ¹	Emission Unit Vented Through This Point <i>(Must match Emission Units Table & Plot Plan)</i>		Air Pollution Control Device <i>(Must match Emission Units Table & Plot Plan)</i>		Vent Time for Emission Unit <i>(chemical processes only)</i>		All Regulated Pollutants - Chemical Name/CAS ³ <i>(Speciate VOCs & HAPS)</i>	Maximum Potential Uncontrolled Emissions ⁴		Maximum Potential Controlled Emissions ⁵		Emission Form or Phase <i>(At exit conditions, Solid, Liquid or Gas/Vapor)</i>	Est. Method Used ⁶	Emission Concentration ⁷ (ppmv or mg/m ⁴)
		ID No.	Source	ID No.	Device Type	Short Term ²	Max (hr/yr)		lb/hr	ton/yr	lb/hr	ton/yr			
S-14	Bin vent	E-06-06	Bulk Lime Tank	C-12	Fabric filter	N/A	N/A	PM PM10 PM2.5	See Attachment N				PM/PM10/ PM2.5 - Solid Particulate	EE	N/D
S-17	Bin vent	E-06-09	Lime Use Tank	C-15	Fabric filter			PM PM10 PM2.5							

The EMISSION POINTS DATA SUMMARY SHEET provides a summation of emissions by emission unit. Note that uncaptured process emission unit emissions are not typically considered to be fugitive and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET. Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions). Please complete the FUGITIVE EMISSIONS DATA SUMMARY SHEET for fugitive emission activities.

¹ Please add descriptors such as upward vertical stack, downward vertical stack, horizontal stack, relief vent, rain cap, etc.

² Indicate by "C" if venting is continuous. Otherwise, specify the average short-term venting rate with units, for intermittent venting (ie., 15 min/hr). Indicate as many rates as needed to clarify frequency of venting (e.g., 5 min/day, 2 days/wk).

³ List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. **LIST** Acids, CO, CS₂, VOCs, H₂S, Inorganics, Lead, Organics, O₃, NO, NO₂, SO₂, SO₃, all applicable Greenhouse Gases (including CO₂ and methane), etc. **DO NOT LIST** H₂, H₂O, N₂, O₂, and Noble Gases.

⁴ Give maximum potential emission rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

⁵ Give maximum potential emission rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

⁶ Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (specify).

⁷ Provide for all pollutant emissions. Typically, the units of parts per million by volume (ppmv) are used. If the emission is a mineral acid (sulfuric, nitric, hydrochloric or phosphoric) use units of milligram per dry cubic meter (mg/m³) at standard conditions (68 °F and 29.92 inches Hg) (see 45CSR7). If the pollutant is SO₂, use units of ppmv (See 45CSR10).

Attachment J

EMISSION POINTS DATA SUMMARY SHEET

[illegible]¹ Give at operating conditions. Include inerts.² Release height of emissions above ground level.

ATTACHMENT K
FUGITIVE EMISSION DATA SUMMARY SHEET

Attachment K

FUGITIVE EMISSIONS DATA SUMMARY SHEET

The FUGITIVE EMISSIONS SUMMARY SHEET provides a summation of fugitive emissions. Fugitive emissions are those emissions which could not reasonably pass through a stack, chimney, vent or other functionally equivalent opening. Note that uncaptured process emissions are not typically considered to be fugitive, and must be accounted for on the appropriate EMISSIONS UNIT DATA SHEET and on the EMISSION POINTS DATA SUMMARY SHEET.

Please note that total emissions from the source are equal to all vented emissions, all fugitive emissions, plus all other emissions (e.g. uncaptured emissions).

APPLICATION FORMS CHECKLIST - FUGITIVE EMISSIONS
1.) Will there be haul road activities? <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If YES, then complete the HAUL ROAD EMISSIONS UNIT DATA SHEET.
2.) Will there be Storage Piles? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If YES, complete Table 1 of the NONMETALLIC MINERALS PROCESSING EMISSIONS UNIT DATA SHEET.
3.) Will there be Liquid Loading/Unloading Operations? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If YES, complete the BULK LIQUID TRANSFER OPERATIONS EMISSIONS UNIT DATA SHEET.
4.) Will there be emissions of air pollutants from Wastewater Treatment Evaporation? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET.
5.) Will there be Equipment Leaks (e.g. leaks from pumps, compressors, in-line process valves, pressure relief devices, open-ended valves, sampling connections, flanges, agitators, cooling towers, etc.)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If YES, complete the LEAK SOURCE DATA SHEET section of the CHEMICAL PROCESSES EMISSIONS UNIT DATA SHEET.
6.) Will there be General Clean-up VOC Operations? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET.
7.) Will there be any other activities that generate fugitive emissions? Yes, one screen (E-03-03) and some negligible emissions from surge char truck loading /unloading (material is quenched). <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> If YES, complete the GENERAL EMISSIONS UNIT DATA SHEET or the most appropriate form.
If you answered "NO" to all of the items above, it is not necessary to complete the following table, "Fugitive Emissions Summary."

FUGITIVE EMISSIONS SUMMARY	All Regulated Pollutants Chemical Name/CAS ¹	Maximum Potential Uncontrolled Emissions ²		Maximum Potential Controlled Emissions ³		Est. Method Used ⁴
		lb/hr	ton/yr	lb/hr	ton/yr	
Haul Road/Road Dust Emissions Paved Haul Roads	PM/PM10/PM2.5	See Attachment N for emissions estimates				EE
Unpaved Haul Roads						
Storage Pile Emissions						
Loading/Unloading Operations						
Wastewater Treatment Evaporation & Operations						
Equipment Leaks						
General Clean-up VOC Emissions						
Other: E-02-03 Secondary Screening S-09, Negligible emissions from surge char truck loading/unloading.	PM/PM10/PM2.5	See Attachment N		N/A	N/A	EE

¹ List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. LIST Acids, CO, CS₂, VOCs, H₂S, Inorganics, Lead, Organics, O₃, NO, NO₂, SO₂, SO₃, all applicable Greenhouse Gases (including CO₂ and methane), etc. DO NOT LIST H₂, H₂O, N₂, O₂, and Noble Gases.

² Give rate with no control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

³ Give rate with proposed control equipment operating. If emissions occur for less than 1 hr, then record emissions per batch in minutes (e.g. 5 lb VOC/20 minute batch).

⁴ Indicate method used to determine emission rate as follows: MB = material balance; ST = stack test (give date of test); EE = engineering estimate; O = other (specify).

ATTACHMENT L
EMISSIONS UNIT DATA SHEET

Attachment L
EMISSIONS UNIT DATA SHEET
GENERAL

To be used for affected sources other than asphalt plants, foundries, incinerators, indirect heat exchangers, and quarries.

Identification Number (as assigned on *Equipment List Form*):

<p>1. Name or type and model of proposed affected source:</p> <p>E-02-03 Secondary Screening - Replacement Screen: BM&M Model 10X202CS 10' X 20' Two deck screen E-02-0E Bulk Lime Truck Unloading System E-06-06 Bulk Lime Tank E-06-09 Lime Use Tank</p>
<p>2. On a separate sheet(s), furnish a sketch(es) of this affected source. If a modification is to be made to this source, clearly indicated the change(s). Provide a narrative description of all features of the affected source which may affect the production of air pollutants.</p>
<p>3. Name(s) and maximum amount of proposed process material(s) charged per hour:</p> <p>E-02-03 Secondary Screening 45 tph E-02-0E Bulk Lime Truck Unloading System 27 tph E-06-06 Bulk Lime Tank 5 tph E-06-09 Lime Use Tank 5tph</p>
<p>4. Name(s) and maximum amount of proposed material(s) produced per hour:</p> <p>Same as above.</p>
<p>5. Give chemical reactions, if applicable, that will be involved in the generation of air pollutants:</p> <p>Not applicable</p>

* The identification number which appears here must correspond to the air pollution control device identification number appearing on the *List Form*.

6. Combustion Data (if applicable): Not applicable (a) Type and amount in appropriate units of fuel(s) to be burned:			
(b) Chemical analysis of proposed fuel(s), excluding coal, including maximum percent sulfur and ash:			
(c) Theoretical combustion air requirement (ACF/unit of fuel):			
@	°F and	psia.	
(d) Percent excess air:			
(e) Type and BTU/hr of burners and all other firing equipment planned to be used:			
(f) If coal is proposed as a source of fuel, identify supplier and seams and give sizing of the coal as it will be fired:			
(g) Proposed maximum design heat input:			
			× 10 ⁶ BTU/hr.
7. Projected operating schedule:			
Hours/Day	24	Days/Week	7
		Weeks/Year	52

8. Projected amount of pollutants that would be emitted from this affected source if no control devices were used: See Attachment N

@	°F and	psia
a. NO _x	lb/hr	grains/ACF
b. SO ₂	lb/hr	grains/ACF
c. CO	lb/hr	grains/ACF
d. PM ₁₀	lb/hr	grains/ACF
e. Hydrocarbons	lb/hr	grains/ACF
f. VOCs	lb/hr	grains/ACF
g. Pb	lb/hr	grains/ACF
h. Specify other(s)	lb/hr	grains/ACF
	lb/hr	grains/ACF
	lb/hr	grains/ACF
	lb/hr	grains/ACF
	lb/hr	grains/ACF

NOTE: (1) An Air Pollution Control Device Sheet must be completed for any air pollution device(s) used to control emissions from this affected source.

(2) Complete the Emission Points Data Sheet.

<p>9. Proposed Monitoring, Recordkeeping, Reporting, and Testing</p> <p>Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.</p>	
<p>MONITORING</p> <p>KMC will monitor visible emissions from the operations in accordance with the requirements of the existing Title V operating permit.</p>	<p>RECORDKEEPING</p> <p>KMC will calculate and record emissions from the operations in accordance with the requirements of the existing Title V operating permit.</p>
<p>REPORTING</p> <p>KMC will report emissions from the operations in accordance with the requirements of the existing Title V operating permit.</p>	<p>TESTING</p> <p>Not applicable</p>
<p>MONITORING. PLEASE LIST AND DESCRIBE THE PROCESS PARAMETERS AND RANGES THAT ARE PROPOSED TO BE MONITORED IN ORDER TO DEMONSTRATE COMPLIANCE WITH THE OPERATION OF THIS PROCESS EQUIPMENT OPERATION/AIR POLLUTION CONTROL DEVICE.</p> <p>RECORDKEEPING. PLEASE DESCRIBE THE PROPOSED RECORDKEEPING THAT WILL ACCOMPANY THE MONITORING.</p> <p>REPORTING. PLEASE DESCRIBE THE PROPOSED FREQUENCY OF REPORTING OF THE RECORDKEEPING.</p> <p>TESTING. PLEASE DESCRIBE ANY PROPOSED EMISSIONS TESTING FOR THIS PROCESS EQUIPMENT/AIR POLLUTION CONTROL DEVICE.</p>	
<p>10. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty</p> <p>Not applicable</p>	

Attachment L – See Attachment N for Roadway Emission Estimates

FUGITIVE EMISSIONS FROM UNPAVED HAULROADS

UNPAVED HAULROADS (including all equipment traffic involved in process, haul trucks, endloaders, etc.)

		PM	PM-10
k =	Particle size multiplier	0.80	0.36
s =	Silt content of road surface material (%)		
p =	Number of days per year with precipitation >0.01 in.		

Item Number	Description	Number of Wheels	Mean Vehicle Weight (tons)	Mean Vehicle Speed (mph)	Miles per Trip	Maximum Trips per Hour	Maximum Trips per Year	Control Device ID Number	Control Efficiency (%)
1									
2									
3									
4									
5									
6									
7									
8									

Source: AP-42 Fifth Edition – 13.2.2 Unpaved Roads

$$E = k \times 5.9 \times (s \div 12) \times (S \div 30) \times (W \div 3)^{0.7} \times (w \div 4)^{0.5} \times ((365 - p) \div 365) = \text{lb/Vehicle Mile Traveled (VMT)}$$

Where:

		PM	PM-10
k =	Particle size multiplier	0.80	0.36
s =	Silt content of road surface material (%)		
S =	Mean vehicle speed (mph)		
W =	Mean vehicle weight (tons)		
w =	Mean number of wheels per vehicle		
p =	Number of days per year with precipitation >0.01 in.		

For lb/hr: $[\text{lb} \div \text{VMT}] \times [\text{VMT} \div \text{trip}] \times [\text{Trips} \div \text{Hour}] = \text{lb/hr}$

For TPY: $[\text{lb} \div \text{VMT}] \times [\text{VMT} \div \text{trip}] \times [\text{Trips} \div \text{Hour}] \times [\text{Ton} \div 2000 \text{ lb}] = \text{Tons/year}$

SUMMARY OF UNPAVED HAULROAD EMISSIONS

Item No.	PM				PM-10			
	Uncontrolled lb/hr		Controlled lb/hr		Uncontrolled lb/hr		Controlled lb/hr	
	TPY		TPY		TPY		TPY	
1								
2								
3								
4								
5								
6								
7								
8								
TOTALS								

FUGITIVE EMISSIONS FROM PAVED HAULROADS

INDUSTRIAL PAVED HAULROADS (including all equipment traffic involved in process, haul trucks, endloaders, etc.)

I =	Industrial augmentation factor (dimensionless)	
n =	Number of traffic lanes	
s =	Surface material silt content (%)	
L =	Surface dust loading (lb/mile)	

Item Number	Description	Mean Vehicle Weight (tons)	Miles per Trip	Maximum Trips per Hour	Maximum Trips per Year	Control Device ID Number	Control Efficiency (%)
1							
2							
3							
4							
5							
6							
7							
8							

Source: AP-42 Fifth Edition – 11.2.6 Industrial Paved Roads

$$E = 0.077 \times I \times (4 \div n) \times (s \div 10) \times (L \div 1000) \times (W \div 3)^{0.7} = \text{lb/Vehicle Mile Traveled (VMT)}$$

Where:

I =	Industrial augmentation factor (dimensionless)	
n =	Number of traffic lanes	
s =	Surface material silt content (%)	
L =	Surface dust loading (lb/mile)	
W =	Average vehicle weight (tons)	

For lb/hr: $[lb \div VMT] \times [VMT \div trip] \times [Trips \div Hour] = \text{lb/hr}$

For TPY: $[lb \div VMT] \times [VMT \div trip] \times [Trips \div Hour] \times [Ton \div 2000 lb] = \text{Tons/year}$

SUMMARY OF PAVED HAULROAD EMISSIONS

Item No.	Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY
1				
2				
3				
4				
5				
6				
7				
8				
TOTALS				

ATTACHMENT M
AIR POLLUTION CONTROL DEVICE SHEET

Attachment M

Air Pollution Control Device Sheet

(BAGHOUSE)

Control Device ID No. (must match Emission Units Table): Lime Use Tank Bin Vent (C-15, Replacement)

Equipment Information and Filter Characteristics

1. Manufacturer: AES Model No. FRC 9X27		2. Total number of compartments: 1	
		3. Number of compartment online for normal operation: 1	
4. Provide diagram(s) of unit describing capture system with duct arrangement and size of duct, air volume, capacity, horsepower of movers. If applicable, state hood face velocity and hood collection efficiency.			
5. Baghouse Configuration: <input checked="" type="checkbox"/> Open Pressure <input type="checkbox"/> Closed Pressure <input type="checkbox"/> Closed Suction (check one) <input type="checkbox"/> Electrostatically Enhanced Fabric <input type="checkbox"/> Other, Specify			
6. Filter Fabric Bag Material: <input type="checkbox"/> Nomex nylon <input type="checkbox"/> Wool <input checked="" type="checkbox"/> Polyester <input type="checkbox"/> Polypropylene <input type="checkbox"/> Acrylics <input type="checkbox"/> Ceramics <input type="checkbox"/> Fiber Glass <input type="checkbox"/> Cotton Weight oz./sq.yd <input type="checkbox"/> Teflon Thickness in <input type="checkbox"/> Others, specify		7. Bag Dimension: Diameter 6.5 in. Length 43 ft.	
		8. Total cloth area: 27 x 9 = 243 ft ²	
		9. Number of bags: 9	
		10. Operating air to cloth ratio: 2.5 ft/min	
11. Baghouse Operation: <input checked="" type="checkbox"/> Continuous <input type="checkbox"/> Automatic <input type="checkbox"/> Intermittent			
12. Method used to clean bags: <input type="checkbox"/> Mechanical Shaker <input type="checkbox"/> Sonic Cleaning <input type="checkbox"/> Reverse Air Jet <input type="checkbox"/> Pneumatic Shaker <input type="checkbox"/> Reverse Air Flow <input type="checkbox"/> Other: <input type="checkbox"/> Bag Collapse <input checked="" type="checkbox"/> Pulse Jet <input type="checkbox"/> Manual Cleaning <input type="checkbox"/> Reverse Jet			
13. Cleaning initiated by: <input checked="" type="checkbox"/> Timer <input type="checkbox"/> Frequency if timer actuated <input type="checkbox"/> Expected pressure drop range in. of water <input type="checkbox"/> Other			
14. Operation Hours: Max. per day: 24 Max. per yr: 365		15. Collection efficiency: Rating: 99+ % Guaranteed minimum: 99+ %	

Gas Stream Characteristics

16. Gas flow rate into the collector: 600		ACFM at 70	°F and Ambient	PSIA
ACFM: Design: 600		PSIA	Maximum: PSIA	Average Expected: PSIA
17. Water Vapor Content of Effluent Stream: Amb		lb. Water/lb. Dry Air		
18. Gas Stream Temperature: 70		°F	19. Fan Requirements: N/A	hp
			OR	ft ³ /min
20. Stabilized static pressure loss across baghouse. Pressure Drop:		High	N/D	in. H ₂ O
		Low	N/D	in. H ₂ O
21. Particulate Loading: Inlet: N/D		grain/scf	Outlet: <0.01	grain/scf

22. Type of Pollutant(s) to be collected (if particulate give specific type):

Lime dust

23. Is there any SO₃ in the emission stream? ☒ No ☐ Yes SO₃ content: ppmv

24. Emission rate of pollutant (specify) into and out of collector at maximum design operating conditions:

Pollutant	IN		OUT	
	lb/hr	grains/acf	lb/hr	grains/acf
See attachment N				

25. Complete the table:

Particulate Size Range (microns)	Particle Size Distribution at Inlet to Collector	Fraction Efficiency of Collector
	Weight % for Size Range	Weight % for Size Range
0 – 2	N/D	
2 – 4		
4 – 6		
6 – 8		
8 – 10		
10 – 12		
12 – 16		
16 – 20		
20 – 30		
30 – 40		
40 – 50		
50 – 60		
60 – 70		
70 – 80		
80 – 90		
90 – 100		
>100		

26. How is filter monitored for indications of deterioration (e.g., broken bags)?

- ☐ Continuous Opacity
- ☐ Pressure Drop
- ☐ Alarms-Audible to Process Operator
- ☒ Visual opacity readings, Frequency: See current operating permit.
- ☐ Other, specify:

27. Describe any recording device and frequency of log entries:

None

28. Describe any filter seeding being performed:

None

29. Describe any air pollution control device inlet and outlet gas conditioning processes (e.g., gas cooling, gas reheating, gas humidification):

None

30. Describe the collection material disposal system:

Returned to process

31. Have you included **Baghouse Control Device** in the Emissions Points Data Summary Sheet? Yes

32. Proposed Monitoring, Recordkeeping, Reporting, and Testing

Please propose monitoring, recordkeeping, and reporting in order to demonstrate compliance with the proposed operating parameters. Please propose testing in order to demonstrate compliance with the proposed emissions limits.

MONITORING: KMC will monitor visible emissions from the operations in accordance with the requirements of the existing Title V operating permit.

RECORDKEEPING: KMC will calculate and record emissions from the operations in accordance with the requirements of the existing Title V operating permit.

REPORTING: KMC will report emissions from the operations in accordance with the requirements of the existing Title V operating permit.

TESTING: Not applicable

MONITORING: Please list and describe the process parameters and ranges that are proposed to be monitored in order to demonstrate compliance with the operation of this process equipment or air control device.

RECORDKEEPING: Please describe the proposed recordkeeping that will accompany the monitoring.

REPORTING: Please describe any proposed emissions testing for this process equipment on air pollution control device.

TESTING: Please describe any proposed emissions testing for this process equipment on air pollution control device.

33. Manufacturer's Guaranteed Capture Efficiency for each air pollutant.

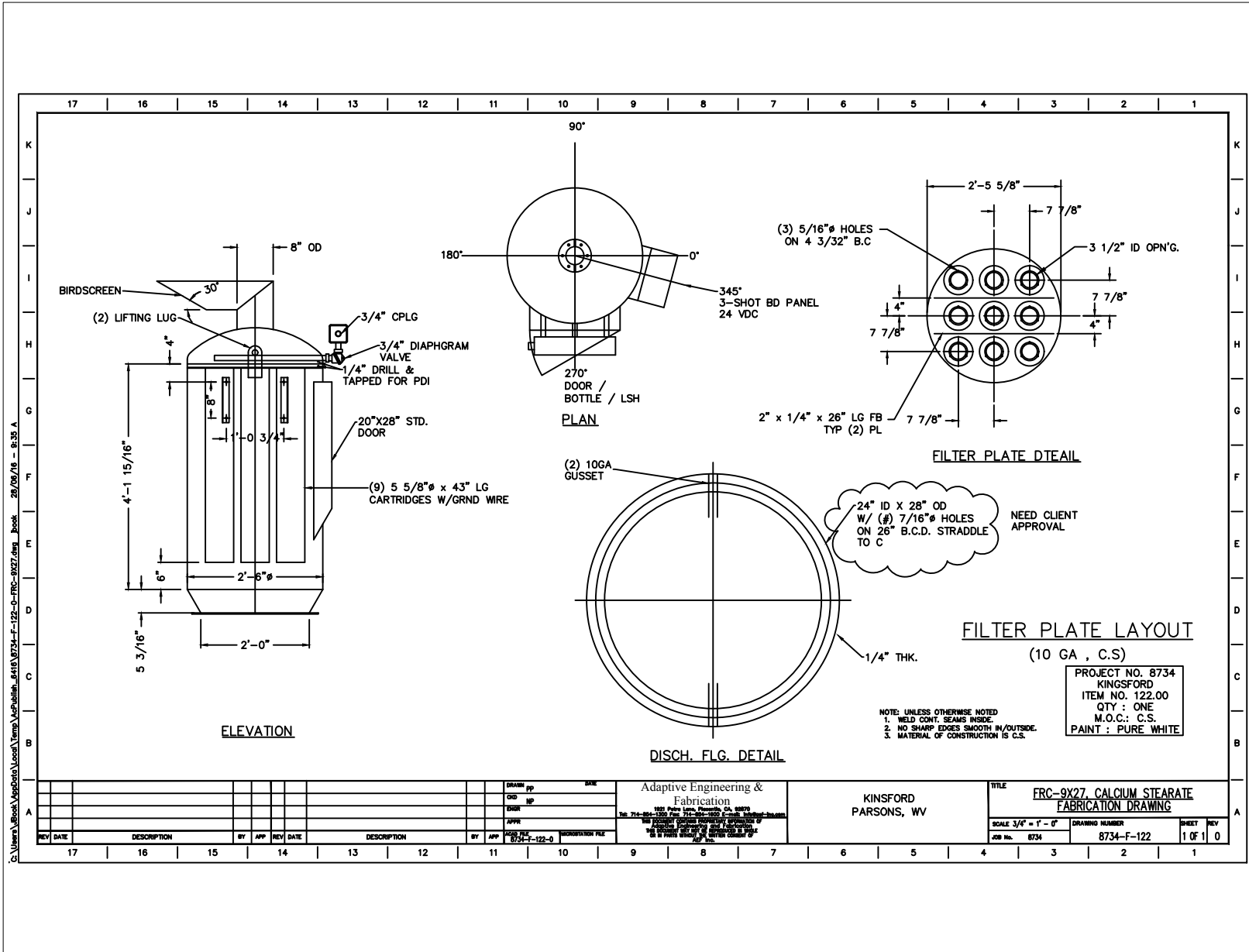
N/A

34. Manufacturer's Guaranteed Control Efficiency for each air pollutant.

N/A

35. Describe all operating ranges and maintenance procedures required by Manufacturer to maintain warranty.

N/A



ATTACHMENT N
SUPPORTING EMISSION CALCULATIONS

TABLE N-1
POTENTIAL FACILITY EMISSIONS
KINGSFORD MANUFACTURING CO. - PARSONS, WV

Source	Potential Annual Emissions (tons/yr)								
	NO _x	CO	VOC	SO ₂	PM	PM ₁₀	PM _{2.5}	Methanol	Lead
Wood & Char Piles (E-01)					15.00	7.05	1.05		5.25E-05
Raw Material Handling (E-02)					0.71	0.34	0.05		2.97E-06
Charring & Briquet Dryers (E-03)	237.50	13.31	6.65	64.60	175.78	129.07	66.97	3.70	1.36E-02
Briquet Coolers (E-04)					38.50	19.25	11.55		6.43E-04
Solvent Treated Briquet Production (E-05)			83.00						
Minor Ingredient Batching/Dry Storage (E-06)					3.33	3.33	3.33		1.34E-05
Natural Gas Burning (E-07)	10.00	8.40	0.55	0.06	0.76	0.76	0.76		5.00E-05
Briquet Handling (E-08)					29.47	29.47	29.47		4.92E-04
Plant Roads (E-09)					5.81	1.16	0.29		
Liquid Storage (E-10)			1.10						
Emergency Equipment (E-11)	3.29	0.89	0.32	0.28	0.27	0.27	0.27		
Total	250.79	22.60	91.62	64.94	269.63	190.70	113.74	3.70	1.48E-02

Source	Operating Schedule		Maximum Annual Production	Maximum Hourly Production
	(hr/yr)	Units	(dry ton/yr)	(dry ton/hr)
ACC	8,760	Wood (dry)	209,000	38.5
		Wood (wet)	418,000	
Briquet Dryers	8,760	Dry Briquets	154,000	24

Potential to emit assumptions
Natural gas throughput - 200 MMcf/yr
Solvent treaded briquet (STB) production - 20 tph, 64,000 tpy
Baghouses - outlet grain loading 0.01 gr/scf, 8,760 hours/yr
Wood pile throughput - 500,000 tpy

TABLE N-2
WOOD AND CHAR PILE EMISSIONS
KINGSFORD MANUFACTURING CO. - PARSONS, WEST VIRGINIA

Emissions Unit Number	Emissions Point Number	Name of Emissions Unit	Annual Throughput ^a	PM Emissions Factor ^b	Control Factor	Hourly PM Emissions Rate	Hourly PM ₁₀ Emissions Rate	Hourly PM _{2.5} Emissions Rate	Annual PM Emissions Rate	Annual PM ₁₀ Emissions Rate	Annual PM _{2.5} Emissions Rate
			(Dry Tons)	(lb/Dry Ton)		(lbs)	(lbs)	(lbs)	(Tons)	(Tons)	(Tons)
01	01	Wood Pile	250,000	0.1		2.85	1.34	0.20	12.50	5.88	0.88
	02	Char and coal Pile	50,000	0.1		0.57	0.27	0.04	2.50	1.18	0.18
TOTALS						3.42	1.61	0.24	15.00	7.05	1.05

^a Emission factor based on conservative adjustment of AP-42 factors. PM10 and PM2.5 fractions were calculated pursuant to AP-42 Section 13.2.4. See Table C-3 for details.

TABLE N-3
MATERIAL HANDLING EMISSIONS
KINGSFORD MANUFACTURING CO. - PARSONS, WEST VIRGINIA

Emissions Unit Number	Emissions Point Number	Name of Emissions Unit	Annual TPY (Wet Tons)	PM Emissions Factor ^a (lb/Wet Ton)	PM ₁₀ Emissions Factor (lb/Wet Ton)	PM _{2.5} Emissions Factor (lb/Wet Ton)	Control Factor	Hourly PM Emissions Rate (lbs)	Hourly PM ₁₀ Emissions Rate (lbs)	Hourly PM ₁₀ Emissions Rate (lbs)	Annual PM Emissions Rate (Tons)	Annual PM ₁₀ Emissions Rate (Tons)	Annual PM _{2.5} Emissions Rate (Tons)
02	01	Transfer Drag Pit to 48" Belt	418,000	9.19E-04	4.35E-04	6.59E-05	0	0.043873909	0.020751173	0.00314232	0.192	0.091	0.014
02	02	Primary Screening	418,000	9.19E-04	4.35E-04	6.59E-05	0	0.043873909	0.020751173	0.00314232	0.192	0.091	0.014
02	03	Secondary Screening	125,400	9.19E-04	4.35E-04	6.59E-05	0	0.013162173	0.006225352	0.000942696	0.058	0.027	0.004
02	04	600 Ft Belt to Dryer Feed Bin	418,000	9.19E-04	4.35E-04	6.59E-05	0	0.043873909	0.020751173	0.00314232	0.192	0.091	0.014
02	05	Wood with Metal Bypass Belt	418	9.19E-04	4.35E-04	6.59E-05	0	4.38739E-05	2.07512E-05	3.14232E-06	1.92E-04	9.09E-05	1.38E-05
02	06	Wood Dryer Bin Bypass Screw	418	9.19E-04	4.35E-04	6.59E-05	0	4.38739E-05	2.07512E-05	3.14232E-06	1.92E-04	9.09E-05	1.38E-05
02	07	Char Truck Transport	0	9.19E-04	4.35E-04	6.59E-05	0	0	0	0	0.000	0.000	0.000
02	09	Beryl Char and Coal Truck Dumping	111,600	9.19E-04	4.35E-04	6.59E-05	0	0.011713704	0.005540265	0.000838954	5.13E-02	2.43E-02	3.67E-03
02	0A	Bulk Coal Tank to Belt Transfer	61,600	9.19E-04	4.35E-04	6.59E-05	0	0.006465629	0.003058068	0.000463079	2.83E-02	1.34E-02	2.03E-03
02	0B	Rerun Char Tank Bypass Screw	154	9.19E-04	4.35E-04	6.59E-05	0	1.61641E-05	7.64517E-06	1.1577E-06	7.08E-05	3.35E-05	5.07E-06
02	0C	Material Handling, Char Hammer mill		0	0	0	0	0	0	0	0.00	0.00	0.00
		Existing Wood Sizing Hammermill											
02	0D	New Wood Sizing Hammermill		0	0	0	0	0	0	0	0.00	0.00	0.00
02	0E	Limestone Handling	15,000	2.E-02	1.E-02	2.E-03	0	0.042460029	0.020082446	0.003041056	0.19	0.09	0.01
TOTALS								0.16	0.08	0.01	0.71	0.34	0.05

^aFor wood coal and char, PM and PM₁₀ emission factors estimated per AP-42, Section 13.2.4
Emissions Factor = Particle Size Multiplier x 0.0032 x (Wind Speed/5)^{1.5} / (Moisture Content/2)^{1.4}
per AP-42, Section 13.2.4.
Particle size multiplier = 0.74 for PM₁₀, 0.35 for PM₁₀.
Wind speed = 6.2 mph
Moisture content conservatively assumed to be similar to coal (4.8%)

For bulk limestone unloading (e-02-0E), emissions were estimated from US EPA AP-42 Chapter 13.2.4 "Aggregate Handling and Storage Piles" (11/06) using the equation $E = k \cdot 0.0032 \cdot U \cdot (M/2)^{1.4}$ where E is the emission factor in lb/ton, k is the particle size multiplier, U is the mean wind speed in mph, and M is the material moisture content in %. Wind speed used in the calculations is 6.2mph (average annual wind speed for Parson, WV), and Moisture content used was 1% (lower range of moisture content of delivered limestone per supplier). Particle size multipliers are 0.74 for PM, 0.35 for PM₁₀, and 0.053 for PM_{2.5}. Three e drop points were estimated.

TABLE N-4
CHARRING/ACC AND BRIQUET DRYER EMISSIONS
KINGSFORD MANUFACTURING CO. - PARSONS, WV

Emissions Unit Number	Emissions Point Number	Pollutant	Maximum Annual Char Production (tons/yr)	Emission Factor ^a (lb/ton char)	Maximum Annual Wood Throughput (tons/yr)	Emission Factor ^a (lb/ton dry wood)	ACC Stack Emission Rate ^b (ton/yr)	Stack Emission Rate ^c (ton/yr)	Total Emission Rate (ton/yr)
03	01/02/03N	NO _x	38,000	12.5	209,000	2.27	201.88	35.63	237.50
		CO	38,000	N/D	209,000	N/D	1.00	12.31	13.31
		VOC	38,000	N/D	209,000	N/D	1.15	5.50	6.65
		SO ₂	38,000	3.4	209,000	0.62	54.91	9.69	64.60
		PM	38,000	7.23	209,000	1.31	137.28	38.50	175.78
		PM ₁₀	38,000	5.78	209,000	1.05	109.82	19.25	129.07
		PM _{2.5}	38,000	2.51	209,000	0.46	47.72	15.40	63.12
		Methanol	38,000	N/D	209,000	N/D	0.64	3.06	3.70

^a Emission factors for wood dryer/retort furnace/ACC system based upon data from similar Kingsford operations, increased for statistical confidence. The ACC PM₁₀ fraction is estimated to be 80% of PM, again based on similar Kingsford operations.

^b Stack emission rates for gaseous pollutants are split 85% to the ACC and 15% to the briquet dryers based on the 15% flow going to the briquet dryers. ACC stack emission factors & rates for TSP and PM₁₀ do not account for the 15% exhausted to the briquet dryers since these emissions are accounted for in the dryer TSP/PM₁₀ calculations.

^c Briquet dryer PM emissions come from Table C-5.

^d Methanol emissions using U.S. EPA AP-42 Section 10.7 (September 1995) ratio of methanol to VOC emission factors times estimated VOC emissions from ACC and briquet dryers:

AP-42 Ratio of Methanol to VOC = [(150 lb methanol/ton) / (270 lb VOC/ton)] = 0.556 methanol/VOC

TABLE N-5
BRIQUET DRYER/COOLER EMISSIONS
KINGSFORD MANUFACTURING CO. - PARSONS, WV

Emissions Unit Number	Emissions Point Number	Source	Maximum Annual Production	PM Emission Factor ^a	PM Emission Rate	PM ₁₀ Emission Factor ^a	PM ₁₀ Emission Rate	PM _{2.5} Emission Factor ^a	PM _{2.5} Emission Rate
			(tons/yr)	(lb/ton briquets)	(ton/yr)	(lb/ton briquets)	(ton/yr)	(lb/ton briquets)	(ton/yr)
03	02/03N	Briquet Dryers	154,000	0.5	38.50	0.25	19.25	0.2	15.40
04	01/02N	Briquet Coolers	154,000	0.5	38.50	0.25	19.25	0.15	11.55

^a PM emission factors based upon emissions data from similar Kingsford operations, increased for statistical confidence. PM10 fraction is assumed to be 50% of PM also based upon similar Kingsford operations., and PM2.5 factors based on emissions measured at aimilar Kingsford operations.

TABLE N-6
SOLVENT TREATED BRIQUET PRODUCTION EMISSIONS
KINGSFORD MANUFACTURING CO. - PARSONS, WV

Emissions Unit Number	Emissions Point Number	Pollutant	Maximum Annual STB Production (tons/yr)	Total Emission Rate^a (ton/yr)
05	01	VOC	64,000	83.00

^a Emissions unchanged from current operating permit.

Hourly VOC Emissions

Scenario A - 2.82 lbs/hr @ 20 tph STB - ACC operating

Scenario B - 36.6 lbs/hr @ 13 tph STB - ACC down

TABLE N-7
MINOR INGREDIENT BATCHING/DRY STORAGE EMISSIONS
KINGSFORD MANUFACTURING CO. - PARSONS, WEST VIRGINIA

Emissions Unit Number	Emissions Point Number	Name of Emissions Unit	Annual TPY/Normal CFM	PM Emission Factor ^a (lb/Wet Ton) (Gr/CF)	PM ₁₀ Emission Factor (lb/Wet Ton) (Gr/CF)	PM _{2.5} Emission Factor (lb/Wet Ton) (Gr/CF)	Control Factor	Hourly PM Emission Rate	Hourly PM ₁₀ Emission Rate	Hourly PM _{2.5} Emission Rate	Annual PM Emission Rate	Annual PM ₁₀ Emission Rate	Annual PM _{2.5} Emission Rate
								(lbs)	(lbs)	(lbs)	(TONS)	(TONS)	(TONS)
06	01	COAL TANK	100	1.00E-02	1.00E-02	1.00E-02	0.00%	0.01	0.01	0.01	0.038	0.038	0.038
	02	BERYL CHAR TANKS	525	1.00E-02	1.00E-02	1.00E-02	0.00%	0.05	0.05	0.05	0.197	0.197	0.197
	03	RERUN CHAR TANK	5	1.00E-01	1.00E-01	1.00E-01	0.00%	0.00	0.00	0.00	0.019	0.019	0.019
	04	YARD CHAR TANK	90	1.00E-01	1.00E-01	1.00E-01	0.00%	0.08	0.08	0.08	0.338	0.338	0.338
	05	RETORT CHAR TANKS & TRANSFER	1,406	1.00E-02	1.00E-02	1.00E-02	0.00%	0.12	0.12	0.12	0.528	0.528	0.528
	06	BULK LIME TANK	525	1.00E-02	1.00E-02	1.00E-02	0.00%	0.05	0.05	0.05	0.197	0.197	0.197
	07	BULK NITRATE TANK	560	1.00E-02	1.00E-02	1.00E-02	0.00%	0.05	0.05	0.05	0.210	0.210	0.210
	08	BULK STARCH TANK	560	1.00E-02	1.00E-02	1.00E-02	0.00%	0.05	0.05	0.05	0.210	0.210	0.210
	09	LIME USE TANK - new, larger bin vent	600	1.00E-02	1.00E-02	1.00E-02	0.00%	0.05	0.05	0.05	0.225	0.225	0.225
	0A	WET STARCH USE TANK	425	1.00E-02	1.00E-02	1.00E-02	0.00%	0.04	0.04	0.04	0.160	0.160	0.160
	0B	DRY STARCH USE TANK	425	1.00E-02	1.00E-02	1.00E-02	0.00%	0.04	0.04	0.04	0.160	0.160	0.160
	0C	BORAX USE TANK	250	1.00E-02	1.00E-02	1.00E-02	0.00%	0.02	0.02	0.02	0.094	0.094	0.094
	0D	NITRATE USE TANK	0	1.00E-02	1.00E-02	1.00E-02	0.00%	0.00	0.00	0.00	0.000	0.000	0.000
	0E	MULLER VENT	50	1.00E-01	1.00E-01	1.00E-01	90.00%	0.00	0.00	0.00	0.019	0.019	0.019
	0F	MINORS BATCH MIXING	2500	1.00E-02	1.00E-02	1.00E-02	0.00%	0.21	0.21	0.21	0.939	0.939	0.939
	0G	RETORT CHAR SURGE SILO - To be removed	1406										
TOTALS								0.76	0.76	0.76	3.33	3.33	3.33

^aPM and PM₁₀ emission factors based on Kingsford operating experience for similar sources.

TABLE N-8
NATURAL GAS COMBUSTION EMISSIONS
KINGSFORD MANUFACTURING CO. - PARSONS, WV

Emissions Unit Number	Emissions Point Number	Pollutant	Maximum Annual Natural Gas Throughput ^a (10 ⁶ ft ³ /yr)	Emission Factors ^b (lb/10 ⁶ ft ³)	Annual Hours of Operation ^c (hours/yr)	Emission Rate ^d	
						(lb/hr)	(ton/yr)
07	01	NOx	200	100	8,760	2.28	10.00
		CO	200	84.0	8,760	1.92	8.40
		VOC	200	5.5	8,760	0.13	0.55
		SO ₂	200	0.6	8,760	0.01	0.06
		PM/PM ₁₀ /PM _{2.5}	200	7.6	8,760	0.17	0.76
		Lead	200	0.0005	8,760	0.00001	0.00005

^a Based on approximately 6 times the actual annual usage of ~30 MMCF/yr.

^aEmission factors based upon EPA AP-42 emission factors for natural gas-fired boilers (Section 1.4, 7/98). All PM assumed to be less than 1.0 micrometer.

TABLE N-9
BRIQUET HANDLING DUST COLLECTOR EMISSIONS
KINGSFORD MANUFACTURING CO. - PARSONS, WV

Emissions Unit Number	Emissions Point Number	Source	Pollutant	Flowrate (dscfm)	Exit Grain Loading ^a (gr/dscf)	Hours of Operation ^b (hr/yr)	Emission Rate (lb/hr) (ton/yr)	
08	01	Manufacturing	PM/PM ₁₀ /PM _{2.5}	15,000	0.01	8,760	1.29	5.63
	02	Packaging Process Equipment	PM/PM ₁₀ /PM _{2.5}	30,000	0.01	8,760	2.57	11.26
	03	Packaging Outside Handling	PM/PM ₁₀ /PM _{2.5}	25,000	0.01	8,760	2.14	9.39
	35	Packaging Weigh Scales	PM/PM ₁₀ /PM _{2.5}	8,500	0.01	8,760	0.73	3.19
Total							6.73	29.47

^aTypical baghouse exit grain loading. All PM is assumed to be PM_{2.5}

^bHours of operation assumed similar to briquet dryer operating schedule.

TABLE N-10
PLANT ROAD POTENTIAL EMISSIONS
KINGSFORD MANUFACTURING CO. - PARSONS, WEST VIRGINIA

Emissions Unit Number	Emissions Point Number	Path	Throughput (tons)	Truck Payload (tons)	Round Trips (#)	Road Segments Used	Round Trip Distance (miles)	Annual VMT (miles)	Annual Operating Schedule (hours/yr)	Pollutant	Emission Factor (lbs/VMT) ^a	Emission Rate (lb/hr) (tons/yr)	
09	01	Hogfuel Delivery ^b	500,000 tons hogfuel	20	25,000	A	0.228	5,700		8,760 PM	0.664	0.432	1.892
										8,760 PM10	0.133	0.086	0.378
										8,760 PM2.5	0.033	0.021	0.093
		Coal Delivery ^c	12,160 tons coal	23	529	A,B,F	0.532	281		8,760 PM	0.664	0.021	0.093
										8,760 PM10	0.133	0.004	0.019
										8,760 PM2.5	0.033	0.001	0.005
		Lime Delivery ^d	1,900 tons lime	23	83	A,B,C,D,E	1.100	91		8,760 PM	0.664	0.007	0.030
										8,760 PM10	0.133	0.001	0.006
										8,760 PM2.5	0.033	0.000	0.001
		Starch Delivery ^e	3,230 tons starch	23	140	A,B,C,D,E	1.100	154		8,760 PM	0.664	0.012	0.051
										8,760 PM10	0.133	0.002	0.010
										8,760 PM2.5	0.033	0.001	0.003
		Nitrate Delivery ^f	190 tons nitrate	23	8	A,B,C,D,E	1.100	9		8,760 PM	0.664	0.001	0.003
										8,760 PM10	0.133	0.000	0.001
										8,760 PM2.5	0.033	0.000	0.000
		Borax Delivery ^g	95 tons borax	21.5	4	A,B,C,D,E	1.100	5		8,760 PM	0.664	0.000	0.002
										8,760 PM10	0.133	0.000	0.000
										8,760 PM2.5	0.033	0.000	0.000
		Beryl Char Delivery ^h	28,000 tons char	15	1,867	A,B,C,F	0.684	1,277		8,760 PM	0.664	0.097	0.424
										8,760 PM10	0.133	0.019	0.085
										8,760 PM2.5	0.033	0.005	0.021
		Solvent Delivery ⁱ	7,642 tons solvent	22	347	A,B,C,D,E	1.100	382		8,760 PM	0.664	0.029	0.127
										8,760 PM10	0.133	0.006	0.025
										8,760 PM2.5	0.033	0.001	0.006
		Bag Delivery ^j	27,720,000 bags	107,712 Bags/Truck	257	A,B,C,D,E	1.100	283		8,760 PM	0.664	0.021	0.094
										8,760 PM10	0.133	0.004	0.019
										8,760 PM2.5	0.033	0.001	0.005
		Pallet Wrap Delivery ^k	206,360 lbs. wrap	44,000 lbs/Truck	5	A,B,C,D,E	1.100	5		8,760 PM	0.664	0.000	0.002
										8,760 PM10	0.133	0.000	0.000
										8,760 PM2.5	0.033	0.000	0.000
		Shrink Film Delivery ^l	1,155,000 lbs. film	44,000 lbs/Truck	26	A,B,C,D,E	1.100	29		8,760 PM	0.664	0.002	0.010
										8,760 PM10	0.133	0.000	0.002
										8,760 PM2.5	0.033	0.000	0.000
		Pallet Delivery ^m	308,000 pallets	540 Pallets/Truck	570	A,B	0.418	238		8,760 PM	0.664	0.018	0.079
										8,760 PM10	0.133	0.004	0.016
										8,760 PM2.5	0.033	0.001	0.004
		Pallet Cap Delivery ⁿ	18 Trucks/Year	N/A	18	A,B,C,D,E	1.100	20		8,760 PM	0.664	0.002	0.007
										8,760 PM10	0.133	0.000	0.001
										8,760 PM2.5	0.033	0.000	0.000
		Pallet Liner Delivery ^o	12 Trucks/Year	N/A	12	A,B,C,D,E	1.100	13		8,760 PM	0.664	0.001	0.004
										8,760 PM10	0.133	0.000	0.001
										8,760 PM2.5	0.033	0.000	0.000
		Misc. Delivery ^p	2 Trucks/Year	N/A	2	A,B,C,D,E	1.100	2		8,760 PM	0.664	0.000	0.001
										8,760 PM10	0.133	0.000	0.000
										8,760 PM2.5	0.033	0.000	0.000
		Outbound Traffic	154,000 tons product	22	7,000	80% A,B,C,D 20% A,G	0.684 1.442	5,849		8,760 PM	0.664	0.443	1.941
										8,760 PM10	0.133	0.089	0.388
										8,760 PM2.5	0.033	0.022	0.095
		Routine Traffic	12 Miles/Day			A,B,C,D,E,F,G	0.721	3157.98		8,760 PM	0.664	0.239	1.048
										8,760 PM10	0.133	0.048	0.210
										8,760 PM2.5	0.033	0.012	0.051
		Retort Char Surge Traffic	12 Trucks/Year	15 tons	12	A,B,C,D,E	0.189	2		8,760 PM	0.664	0.00017	0.00075
										8,760 PM10	0.133	0.00003	0.00015
										8,760 PM2.5	0.033	0.00001	0.00004
		Total								PM		1.326	5.808
										PM10		0.265	1.162
										PM2.5		0.065	0.285

Road Segment	Length (Miles)
A	0.114
B	0.095
C	0.076
D	0.057
E	0.208
F	0.057
G	0.114

^a Emission factor calculated according to AP-42 Chapter 13.2.1 (1/11), Paved Roads using the equation $\text{lb/VMT} = k(sL)^{0.91} \times (W)^{1.02}$ where k = particle size multiplier, sL = road surface silt loading in g/m², and W = average vehicle weight in tons.

For the Parsons Plant, the following data was used:

sL = 2 g/m², based on worst case silt loading result of road dust sampling conducted at the KMC Parsons plant.

W = 30 tons (average tractor-trailer weight)

k = 0.011 for PM, 0.0022 for PM₁₀, and 0.00054 for PM_{2.5}

^b Based on maximum dry tons hogfuel and assuming 50% moisture

^c Maximum coal deliveries based on 32% of total maximum briquet production of 154,000 tons/yr.

^d Maximum limedeliveries based on 5% of total maximum briquet production of 154,000 tons/yr.

^e Maximum starch deliveries based on 8.5% of total maximum briquet production of 154,000 tons/yr.

^f Maximum nitrate deliveries based on 0.5% of total maximum briquet production of 154,000 tons/yr.

^g Maximum borax deliveries based on 0.25% of total maximum briquet production of 154,000 tons/yr.

^h Maximum allowable char proction of KMC Beryl plant.

ⁱ Maximum solvent deliveries based on 11.94% of total maximum STB production of 64,000 tons/yr.

^j Maximum potential bag deliveries based on 180 11.1 # bags per ton of maximum briquet production rate of 154,000 tons.

^k Maximum potential wrap deliveries based on 2 pallets per ton of maximum briquet production rate of 154,000 tons and 0.67 lbs. wrap per pallet.

^l Maximum potential film deliveries based on 30 bales per ton of maximum briquet production rate of 154,000 tons and 0.25 lbs. film per bale.

^m 2 pallets per ton of maximum briquet production rate of 154,000 tons.

ⁿ Based on past actual deliveries scaled to maximum potential production rate.

**TABLE N-11
DIESEL WATER PUMP EMISSIONS
KINGSFORD MANUFACTURING CO. - PARSONS, WEST VIRGINIA**

Lake Pumps

Rated Capacity (hp)	Number of Sources	Annual Operating Schedule for Each Pump (hr/yr)	Pollutant	Emission Factor ^a (lbs/hp-hr)	Each Pump		All Pumps	
					Hourly Emissions (lbs/hr)	Annual Emissions (tons/yr)	Hourly Emissions (lbs/hr)	Annual Emissions (tons/yr)
115	4	500	PM	2.20E-03	0.25	6.33E-02	1.01	2.53E-01
115	4	500	SO ₂	2.05E-03	0.24	5.89E-02	0.94	2.36E-01
115	4	500	NO _x	1.52E-02	1.75	4.37E-01	7.00	1.75E+00
115	4	500	CO	6.68E-03	0.77	1.92E-01	3.07	7.68E-01
115	4	500	VOC	2.51E-03	0.29	7.23E-02	1.16	2.89E-01

^aOperating schedule for each pump based upon 0.5 hour of operation per month.

^bAll emission factors for uncontrolled diesel industrial engines. NO_x per EPA 1997 standards for non-road combustion ignition engines. All others per EPA AP-42 (EPA AP-42, Section 3.3).

Fire Pump

Rated Capacity (hp)	Annual Operating Schedule (hr/yr)	Pollutant	Emissions Factors ^a			Emissions	
			(lb/MMBtu)	(g/hp-hr)	(lbs/hp-hr)	(lbs/hr)	(tons/yr)
420	500	NO _x	N/D	6.640	0.0146	6.15	1.54
420	500	CO	N/D	0.490	0.0011	0.45	0.11
420	500	VOC	N/D	0.100	0.0002	0.09	0.02
420	500	TPM/PM ₁₀ /PM _{2.5} ^b	N/D	0.060	0.0001	0.06	0.01
420	500	SO ₂	N/D	N/D	4.05E-04	0.17	0.04
HAPS							
420	500	Benzene	2.85E-04	N/D	2.00E-06	8.38E-04	2.09E-04
420	500	1,3-Butadiene	3.91E-05	N/D	2.74E-07	1.15E-04	2.87E-05
420	500	Toluene	4.09E-04	N/D	2.86E-06	1.20E-03	3.01E-04
420	500	Xylenes	2.85E-04	N/D	2.00E-06	8.38E-04	2.09E-04
420	500	Acetaldehyde	7.67E-04	N/D	5.37E-06	2.25E-03	5.64E-04
420	500	Acrolein	9.25E-05	N/D	6.48E-07	2.72E-04	6.80E-05
420	500	Napthalene	8.48E-05	N/D	5.94E-07	2.49E-04	6.23E-05
420	500	Formaldehyde	1.18E-03	N/D	8.26E-06	3.47E-03	8.67E-04
Total HAPS						9.24E-03	2.31E-03

^aNO_x, CO, VOC and PM emissions factors per engine manufacturers (See attached data sheet). All others per EPA AP-42 (EPA AP-42, Section 3.3).

^b3.4) assuming a BSFC of 7,000 Btu/hp-hr and a sulfur content of 500 ppm (0.05%).

^cassumes all particulate matter is less than 1 µm as per EPA AP-42 Section 3.3 Table 3.3-1.

Emissions Using Manufacturer Supplied Emission Factors								
Rated Capacity (kW/hr)	Rated Capacity (bhp-hr)	Annual Operating Schedule (hr/yr)	Pollutant	Emissions Factors		NSPS Emission Standards ^b	Emissions	
				(g/kW-hr) ^a	(g/bhp-hr)	(g/hp-hr)	(lbs/hr)	(tons/yr)
177.50	238	100	NO _x	0.166	0.124	2.0	0.06	0.0032
177.50	238	100	VOC	0.166	0.124	1.0	0.06	0.0032
177.50	238	100	CO	0.417	0.311	4.0	0.16	0.0082
Emissions Using AP-42 Emission Factors								
Rated Capacity MMBtu/hr	Annual Operating Schedule (hr/yr)	Pollutant	Emissions Factors (lbs/MMBtu)	Emissions (lbs/hr) (tons/yr)				
1.969	100	TPM/PM ₁₀ /PM _{2.5} ^c	0.0194	0.0382	0.0019			
1.969	100	SO ₂	5.88E-04	1.16E-03	5.79E-05			
HAPs								
1.969	100	1,1,2,2- Tetrachloroethane	2.53E-05	4.98E-05	2.49E-06			
1.969	100	1,1,2-Trichloroethane	1.53E-05	3.01E-05	1.51E-06			
1.969	100	1,3-Butadiene	6.63E-04	1.31E-03	6.53E-05			
1.969	100	1,3-Dichloropropene	1.27E-05	2.50E-05	1.25E-06			
1.969	100	Acetaldehyde	2.79E-03	5.49E-03	2.75E-04			
1.969	100	Acrolein	2.63E-03	5.18E-03	2.59E-04			
1.969	100	Benzene	1.58E-03	3.11E-03	1.56E-04			
1.969	100	Carbon Tetrachloride	1.77E-05	3.48E-05	1.74E-06			
1.969	100	Chlorobenzene	1.29E-05	2.54E-05	1.27E-06			
1.969	100	Chloroform	1.37E-05	2.70E-05	1.35E-06			
1.969	100	Ethylbenzene	2.48E-05	4.88E-05	2.44E-06			
1.969	100	Ethylene Dibromide	2.13E-05	4.19E-05	2.10E-06			
1.969	100	Formaldehyde	2.05E-02	4.04E-02	2.02E-03			
1.969	100	Methanol	3.06E-03	6.02E-03	3.01E-04			
1.969	100	Methylene Chloride	4.12E-05	8.11E-05	4.06E-06			
1.969	100	Napthalene	9.71E-05	1.91E-04	9.56E-06			
1.969	100	PAHs	1.41E-04	2.78E-04	1.39E-05			
1.969	100	Styrene	1.19E-05	2.34E-05	1.17E-06			
1.969	100	Toluene	5.58E-04	1.10E-03	5.49E-05			
1.969	100	Vinyl Chloride	7.18E-06	1.41E-05	7.07E-07			
1.969	100	Xylene	1.95E-04	3.84E-04	1.92E-05			
Total HAPs				6.38E-02	3.19E-03			

^aManufacturer combined emission factor for combined THC + NO_x of 0.166 g/kW-hr used individually for both NO_x and VOC to demonstrate compliance with owner-operator emission standards in 40 CFR 60 Subpart JJJJ Table 1.

^bFrom 40 CFR Subpart JJJJ Table 1, Emergency Engines greater than 130 hp.

^cBased on maximum fuel consumption of 1930 c.f. an hour at 100% load.

^dEmission factors from U.S. EPA AP-42 Chapter 3.2, (07/2000) Natural Gas-fired Rich-Burn 4-stroke Reciprocating Engines.

^eAssumes all particulate matter is less than 1 µm as per EPA AP-42 Section 3.2 Table 3.2-3(07/2000).

TABLE N-12
FACILITY LEAD EMISSIONS
KINGSFORD MANUFACTURING CO. - PARSONS, WEST VIRGINIA

Emissions Unit Number	Emission Unit	Emissions Point Number	Emission Point	Material Processed	Maximum Hourly PM Emissions (lb/hr)	Maximum Annual PM Emissions (tons/yr)	Emission Factor ^a (lb Pb/ton PM)	Pb Emission Rate (lb/hr) (ton/yr)	
01	Wood & Char Piles	01	Wood Pile	Wood	2.85	12.50	4.0E-03	5.71E-06	2.50E-05
		02	Char and Coal Pile	Char	0.57	2.50	2.2E-02	6.28E-06	2.75E-05
02	Raw Material Handling	01-06	Wood Handling Operations	Wood	0.14	0.63	4.0E-03	2.90E-07	1.27E-06
		07,09,0B	Char Handling Operations	Char	0.01	0.05	2.2E-02	1.29E-07	5.65E-07
		0A	Coal Handling Operations	Coal	0.01	0.03	8.00E-02	2.59E-07	1.13E-06
03	Charring and Briquet Dryers	01	ACC/Retort	Wood	N/A	175.78	1.5E-01	N/A	1.29E-02
		02,03	Briquet Dryers	Briquets	N/A	38.50	3.34E-02	N/A	6.43E-04
04	Briquet Coolers	01/02	Briquet Coolers	Briquets	N/A	38.50	3.34E-02	N/A	6.43E-04
06	Minor Ingredient Batching	01	Coal Tank	Coal	0.01	0.04	8.00E-02	3.43E-07	1.50E-06
		02-05,0G	Char Tanks	Char	0.25	1.08	2.2E-02	2.72E-06	1.19E-05
07	Natural Gas Use	01	Natural Gas Use	Natural Gas	See Table C-8 "Natural Gas Combustion"			1.14E-05	5.00E-05
08	Briquet Handling	01-03/35	Briquet Handling	Briquets	6.73	29.47	3.34E-02	1.12E-04	4.92E-04

^aEmission factors based on following material lead content assumptions:

Wood - 2 ppm, dry wood per University of Missouri study

Char - based on worst-case char yield assumption of 5.5 (2ppm * 5.5 = 11 ppm = 2.2E-2 lb/ton)

Char ash content assumed to be 15%, ACC PM = 2.2E-02/0.15 = 0.147 lb/hr

Coal based on 40 ppm lead content

Briquets = 16.7 ppm based on char and coal in formulation of product.

ATTACHMENT O
MONITORING/RECORDKEEPING PLANS - NOT APPLICABLE

ATTACHMENT P
CLASS I LEGAL ADVERTISEMENT (TO BE PROVIDED UPON
PUBLICATION)

AIR QUALITY PERMIT NOTICE

Notice of Application

Notice is given that Kingsford Manufacturing Company has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Class II Administrative Update to replace one (1) existing screening operations on their existing raw material handling system, remove the existing retort char surge bin and its associated fabric filter dust collector, install a pneumatic conveyor to transfer lime from the existing coal shed and replace an existing fabric filter on the lime use tank at the charcoal manufacturing plant located on Route 219, two miles South of Parsons, WV, in Tucker County, West Virginia. The latitude and longitude coordinates are: 39.079883 and -79.691224.

The applicant estimates the potential to discharge the following Regulated Air Pollutants will be:

Pollutant	Emissions (tons/yr)
NO_x	250.79
CO	22.60
VOC	91.62
SO₂	64.94
PM	269.63
PM₁₀	190.70
PM_{2.5}	113.74
Methanol	3.70
Lead	0.01
Total HAPs	3.72

Startup of the modified sources is anticipated on or after September 3, 2016. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1250, during normal business hours.

Dated this the **(Day)** day of **July 2016**

By: **Kingsford Manufacturing Company**
Carey Preston
Plant Manager
P.O. Box 464
Parsons, WV 26287

ATTACHMENT Q
BUSINESS CONFIDENTIALITY CLAIMS - NOT APPLICABLE

ATTACHMENT R
AUTHORITY OF CORPORATION



KINGSFORD MANUFACTURING COMPANY

DELEGATION OF SIGNATURE AUTHORITY

Pursuant to the authority granted to the undersigned under the bylaws of Kingsford Manufacturing Company (the "Company"), in her capacity as Vice President - Secretary, the undersigned hereby delegates the right to execute the documents listed below, on behalf of the Company, to the Plant Manager designated below, or, in his/her absence, the acting plant manager, of the Company's facility designated below.

Carey D. Preston
Parsons Plant; Parsons, West Virginia

Documents and Authority:

Authority to sign all environmental reports, plans, and permits, environmental monitoring reports, applications, certifications and other documents for the facility documents requiring the signature of a "Responsible Official," "Responsible Corporate Officer," or other company representative under any federal, state or local environmental law or regulation.

This delegation of authority requires that the person signing any document pursuant to this delegation satisfy himself or herself that, based on information and belief formed after reasonable inquiry, the statements or information in the document are true, accurate, and complete and that the document is otherwise in accordance with any required certification.

Dated: _____

12/15/2011

A handwritten signature in blue ink, appearing to read "Angela Hilt", written over a horizontal line.

Angela Hilt

Vice President - Secretary

KINGSFORD MANUFACTURING COMPANY

Highway 219 S.
PO Box 464
Parsons, WV
26287

(304) 478-2911
FAX: (304) 478-2129



KINGSFORD MANUFACTURING COMPANY

APPOINTMENT OF ACTING PLANT MANAGER

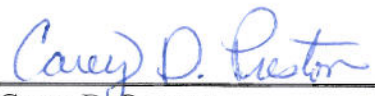
Pursuant to the authority granted to the undersigned as manager of the Parsons Plant; Parsons, West Virginia plant, I hereby appoint Scott Stephenson, Plant Engineering Manager, as acting plant manager in my absence. This appointment shall be effective immediately.

This appointment includes authority to sign all environmental reports, plans, and permits, environmental monitoring reports, applications, certifications and other documents for the facility documents requiring the signature of a "Responsible Official," "Responsible Corporate Officer," or other company representative under any federal, state or local environmental law or regulation.

This authority shall only be exercised when the Plant Manager will be out of the plant for an extended period of time (such as off-site meetings and vacations). Prior to exercising this authority, a reasonable attempt should be made to obtain the Plant Manager's signature.

This appointment requires that the acting plant manager satisfy himself or herself that, based on information and belief formed after reasonable inquiry, the statements or information in the document are true, accurate, and complete and that the document is otherwise in accordance with any required certification.

Dated: 11-4-2011



Carey D. Preston
Plant Manager

Highway 219 S.
PO Box 464
Parsons, WV
26287

(304) 478-2911
FAX: (304) 478-2129

ATTACHMENT S
TITLE V PERMIT REVISION INFORMATION

Attachment S

Title V Permit Revision Information

1. New Applicable Requirements Summary

Mark all applicable requirements associated with the changes involved with this permit revision: *None of these are applicable, see Attachment D.*

<input type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input type="checkbox"/> Minor source NSR (45CSR13)	<input type="checkbox"/> PSD (45CSR14)
<input type="checkbox"/> NESHAP (45CSR15)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input type="checkbox"/> Section 111 NSPS (Subpart(s)_____)	<input type="checkbox"/> Section 112(d) MACT standards (Subpart(s)_____)
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqs.	<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input type="checkbox"/> 45CSR27 State enforceable only rule
<input type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input type="checkbox"/> Compliance Assurance Monitoring (40CFR64) ⁽¹⁾
<input type="checkbox"/> NO _x Budget Trading Program Non-EGUs (45CSR1)	<input type="checkbox"/> NO _x Budget Trading Program EGUs (45CSR26)

⁽¹⁾ If this box is checked, please include **Compliance Assurance Monitoring (CAM) Form(s)** for each Pollutants Specific Emission Unit (PSEU) (See Attachment H to Title V Application). If this box is not checked, please explain why **Compliance Assurance Monitoring** is not applicable:

See Attachment D. Pre-control PM emissions are expected to be less than 100 tpy for new baghouse.

2. Non Applicability Determinations

List all requirements, which the source has determined not applicable to this permit revision and for which a permit shield is requested. The listing shall also include the rule citation and a rationale for the determination.

☐ **Permit Shield Requested** (*not applicable to Minor Modifications*)

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

3. Suggested Title V Draft Permit Language

Are there any changes involved with this Title V Permit revision outside of the scope of the NSR Permit revision? ☐ Yes ☒ No If Yes, describe the changes below.

Also, please provide **Suggested Title V Draft Permit language** for the proposed Title V Permit revision (including all applicable requirements associated with the permit revision and any associated monitoring /recordkeeping/ reporting requirements), OR attach a marked up pages of current Title V Permit. Please include appropriate citations (Permit or Consent Order number, condition number and/or rule citation (e.g. 45CSR§7-4.1)) for those requirements being added / revised.

Request that the new screen be identified in Section 1.0 using existing Source ID number (E-02-03) Request that new baghouse be identified using the existing Control Device number (C-15) table with existing Stack ID design capacity of 600 CFM, and description of "Fabric Filter Dust Collector (C-15), Adaptive Engineering & Fabrication., Model FRC 9X27". The Retort Char Surge Bin (E-06-0G) its associated bin vent (C-33) and stack (S-24) should all be removed from the permit.

4. Active NSR Permits/Permit Determinations/Consent Orders Associated With This Permit Revision

Permit or Consent Order Number	Date of Issuance	Permit/Consent Order Condition Number
R13-1608G	08/20/2012	
R14-001D	05/18/2009	
G60-C012A	08/21/2012	

5. Inactive NSR Permits/Obsolete Permit or Consent Orders Conditions Associated With This Revision

Permit or Consent Order Number	Date of Issuance	Permit/Consent Order Condition Number
	MM/DD/YYYY	
	/ /	

6. Change in Potential Emissions

Pollutant	Change in Potential Emissions (+ or -), TPY
See Attachment N	

All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.

7. Certification For Use Of Minor Modification Procedures (Required Only for Minor Modification Requests)	
<i>Note:</i>	<i>This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete. The criteria for allowing the use of Minor Modification Procedures are as follows:</i>
<div style="margin-left: 40px;"> i. Proposed changes do not violate any applicable requirement; ii. Proposed changes do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit; iii. Proposed changes do not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient air quality impacts, or a visibility increment analysis; iv. Proposed changes do not seek to establish or change a permit term or condition for which there is no underlying applicable requirement and which permit or condition has been used to avoid an applicable requirement to which the source would otherwise be subject (synthetic minor). Such terms and conditions include, but are not limited to a federally enforceable emissions cap used to avoid classification as a modification under any provision of Title I or any alternative emissions limit approved pursuant to regulations promulgated under § 112(j)(5) of the Clean Air Act; v. Proposed changes do not involve preconstruction review under Title I of the Clean Air Act or 45CSR14 and 45CSR19; vi. Proposed changes are not required under any rule of the Director to be processed as a significant modification; </div> <p style="margin-top: 20px;">Notwithstanding subparagraph 45CSR§30-6.5.a.1.A. (items i through vi above), minor permit modification procedures may be used for permit modifications involving the use of economic incentives, marketable permits, emissions trading, and other similar approaches, to the extent that such minor permit modification procedures are explicitly provided for in rules of the Director which are approved by the U.S. EPA as a part of the State Implementation Plan under the Clean Air Act, or which may be otherwise provided for in the Title V operating permit issued under 45CSR30.</p>	
<p>Pursuant to 45CSR§30-6.5.a.2.C., the proposed modification contained herein meets the criteria for use of Minor permit modification procedures as set forth in Section 45CSR§30-6.5.a.1.A. The use of Minor permit modification procedures are hereby requested for processing of this application.</p>	
(Signed):	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <i>(Please use blue ink)</i> </div> <div style="text-align: right;"> Date: <u>7</u> / <u>11</u> / <u>16</u> <i>(Please use blue ink)</i> </div> </div>
Named (typed):	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> Carey Preston Scott Stephenson </div> <div style="text-align: right;"> Title: Plant Manager </div> </div>

Note: Please check if the following included (if applicable):	
<input type="checkbox"/>	Compliance Assurance Monitoring Form(s)
<input type="checkbox"/>	Suggested Title V Draft Permit Language
<i>All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.</i>	