6/21/2016

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

Re: NSR Minor Modification and Title V Significant Permit Revision to Increase Char Production Cap at the Kingsford Manufacturing Company Beryl Plant Permit No. R13-2117D and R30-05700003-2012

Dear Ms. McKeone:

Kingsford Manufacturing Company (KMC) owns and operates a wood char ("char") manufacturing facility located in Beryl, Mineral County, West Virginia. KMC is requesting that the char production caps (Condition 5.1.2 of the R30 permit) be increased from 4.5 tons/hour (tph) and 28,000 tons/year (tpy) to 5.0 tph and 32,000 tpy, respectively. No physical changes will be made to the char production sources (rotary dryer and multi-hearth retort furnace) to increase the annual char production rate. The increased production will be achieved through increasing annual operating hours. The attached air permit application submittal provides an air emissions evaluation to demonstrate that the requested production increases will not result in a significant emissions increase and will not require review under the Regulation 14 pre-construction permit rule. KMC is requesting that the permit be revised through an NSR modification under Regulation 13 and as a significant modification under Regulation 30.

BACKGROUND

The KMC Beryl plant produces char, an ingredient in charcoal briquettes, by pyrolizing wood bark chips in a multi-heart retort furnace. Bark chips are received via belt conveyor from a neighboring paper mill and stored outside in piles before being conveyed through a sizing system to a rotary wood dryer and then to the multi-hearth retort furnace. The char produced in the furnace is quenched with water and conveyed to trailers for transport to another KMC plant for processing into charcoal briquettes.

Prior to 1998 the Beryl plant used a wet scrubber to control emissions from the rotary wood dryer and an afterburner/cooling chamber to control emissions from the furnace. A process flow diagram showing the configuration of the old plant is provided in Attachment F. Stack testing of the "old plant" in 1995 and 1996 was conducted for all criteria pollutants in preparation for the Title V permit application submission. The stack tests demonstrated that PM and PM_{10} emissions from the scrubber and afterburner stacks were considerably higher than at other KMC plants that

Highway 219 S.
PO Box 464
Parsons, WV
26287

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

do not use wet scrubbers and that are equipped with more efficient after combustion chamber (ACC) systems.

The Beryl plant was modified in 1997 with installation of new air pollution control systems including high-efficiency cyclones and a more efficient ACC that controls emissions and serves as the single exhaust stack (S-02) for the wood charring system rotary wood dryer (EU 003-01) and multi-hearth retort furnace (EU 003-02). An annual char production cap was established in permit R13-2117 (22,600 tpy) to limit emissions increases below significant levels based on an actual-to-potential emissions analysis using a 2-year (1994/1995) baseline emissions rate. The baseline emission rates were established based on the 1995 and 1996 stack testing of the old plant and actual char production rates in 1994 and 1995. The char production cap was subsequently increased in 2000 to 28,000 tpy based on stack testing conducted at the "new plant" ACC stack in 1998 and 1999 that demonstrated lower NOx emission rates.

In this permit application, KMC is requesting that the char production cap be increased to 32,000 tpy and is proposing the use of a lower particulate matter (PM) emissions factor of 10.0 lb PM/ton char based on the results of multiple stack tests at the Beryl plant. The current Beryl plant permit limits were established using a PM emissions factor of 11.0 lb PM/ton char. The proposed PM emissions factor is consistent with the factors used at other KMC plants including the Parsons, WV plant. All other pollutant emissions factors remain unchanged.

KMC is also requesting that the hourly char production rate limit (30-day average) be increased from 4.5 to 5.0 tph. The current hourly char rate limit of 4.5 tph is a 30-day average limit. The retort furnace hourly (short term) capacity is in excess of 5 tph and no physical modifications are required to achieve 5.0 tph of char production. KMC will continue to manage monthly char production and furnace operating hours to maintain average hourly char production rates below 5.0 tph.

PROJECT EMISSIONS INVENTORY

The emissions inventory provided in Attachment N demonstrates that the requested increase in char production will not result in significant emissions increase above the baseline 1994/1995 levels. This "actual to potential" emissions evaluation demonstrates that the requested "relaxation" of the current federally enforceable limit on annual char production will not result in a major modification as required by 45-14-19.7.

Table N-1 summarizes the emissions changes and compares the current permit limits with the proposed limits. The requested increases in the PM_{10} and NOx permit limits exceed the R13 "modification" threshold of 10 tpy specified in 45-13-2.17a. None of the requested hourly permit limit increases exceed the "modification" threshold of 6 lbs/hr. Table N-6 summarizes the requested ACC stack emission rates. KMC is requesting that the current ACC emission limits specified in permit Condition 6.1.1 be revised as follows:

TABLE 1
ACC Permit Limits
Requested Revisions for Char Production Increases
Kingsford Manufacturing Company, Beryl, WV

Pollutant	Current ACC Permit Limits[1]		Proposed ACC Permit Limits		Net Proposed Increases	
	lbs/hr	*tons/year*	*lbs/hr*	*tons/yr*	*lbs/hr*	*tons/yr*
CO	8.93	28.82	10.3	33	1.4	4.2
NO_x	65.7	182	65.7[2]	208	--[2]	26
PM	49	158.2	50	160	1.0	1.8
PM_{10}	29.4	94.9	33.9	108	4.5	13.1
SO_2	17	42	17[2]	48	--[2]	6
VOC	2.52	8.1	2.9	9	0.4	0.9

(1) After Combustion Chamber (ACC) emission limits specified in Condition 6.1.1 of R30-05700003-2012
(2) Note that hourly permit limits for NO_x and SO_2 were established using higher "short-term" emission factors. No increases in these limits are being requested.

Because KMC is requesting increases in permitted emission rates for the ACC stack as a result of increasing hourly and annual char production caps, the attached permit application submittal is being provided as an NSR minor modification. An "actual to potential" emissions evaluation is provided in Attachment N to demonstrate that the requested revisions to emissions limits will not result in a significant emissions increase over the baseline 1994/1995 emissions.

$PM_{2.5}$ emission rates have also been included in Attachment N and the actual to potential emissions evaluation demonstrates that the potential $PM_{2.5}$ emissions rate associated with the proposed char production cap of 32,000 tpy is lower than the baseline actual $PM_{2.5}$ emissions associated with the old plant configuration (i.e., net decrease in $PM_{2.5}$ emissions). $PM_{2.5}$ emissions from the current new plant are estimated using KMC stack test data which has shown that the $PM_{2.5}/PM_{10}$ fraction in the ACC exhaust is approximately 70%. This same ratio is applied to the "corrected" baseline PM_{10} emission rate for charring (149 tpy) that was based on the 1997/1998 stack tests of the old plant dryer scrubber and furnace afterburner stacks. Because stack testing of the old plant showed high PM_{10} emissions of about 200 tpy, the application of the $PM_{2.5}/PM_{10}$ fraction to the lower, corrected, baseline PM_{10} emission rate is considered by KMC to be a conservative estimate of baseline $PM_{2.5}$ emissions.

WVDEP applications forms and supporting information are attached. Once the permit application has been determined "administratively complete" we will pay the $1,000 NSR Minor Modification 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

Carey Preston
Plant Manager

cc: Scott Stephenson
Mike Young
Gavin Biebuyck – Liberty Environmental

Kingsford Manufacturing Company

NSR Minor Modification and Title V Significant Permit Revision for Increasing Char Production Cap at a Charcoal Manufacturing Facility

Beryl, West Virginia

June 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

TABLE OF CONTENTS

APPLICATION FOR NSR PERMIT 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 – Beryl Plant

4. The applicant is the:
☐ **OWNER** ☐ **OPERATOR** ☒ **BOTH**

5A. Applicant's mailing address:
P.O Box 6
Beryl, WV 21540-0006

5B. Facility's present physical address:
The facility is located adjacent to WV Route 46 near the WV-Maryland border, slightly west of the town of Luke, MD

6. **West Virginia Business Registration.** Is the applicant a resident of the State of West Virginia? ☐ **YES** ☒ **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 *proposed site?* ☒ **YES** ☐ **NO**

- If **YES,** please explain: Kingsford owns the site
- 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.): Increase in char production capacity at an existing a charcoal manufacturing plant. No sources new sources will be installed and no existing sources will be physically modified.

10. North American Industry Classification System **(NAICS)** code for the facility:
325191

11A. DAQ Plant ID No. (for existing facilities only):
057 - 00003

11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only):
R30-05700003-2012, R13-2117D-2002

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**.

The facility is located adjacent to WV Route 46 near the WV-Maryland border, slightly west of the town of Luke, MD

12.B. New site address (if applicable):	12C. Nearest city or town:	12D. County:
Route 46	Luke, MD	Mineral
12.E. UTM Northing (KM): 4,371.0	12F. UTM Easting (KM): 666.0	12G. UTM Zone: 17

13. Briefly describe the proposed change(s) at the facility:
Increase in char production capacity at an existing a charcoal manufacturing plant. No sources new sources will be installed and no existing sources will be physically modified.

14A. Provide the date of anticipated installation or change: Upon receipt of approval from WVDEP – 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: Upon approval

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). Not applicable

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). $1,000 fee for Modification 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.**

23. Provide a **Process Description** as **Attachment G.**
– Also describe and quantify to the extent possible all changes made to the facility since the last permit review (if applicable).

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

24. Provide **Material Safety Data Sheets (MSDS)** for all materials processed, used or produced as **Attachment H.**
– For chemical processes, provide a MSDS for each compound emitted to the air.

25. Fill out the **Emission Units Table** and provide it as **Attachment I.**

26. Fill out the **Emission Points Data Summary Sheet (Table 1 and Table 2)** and provide it as **Attachment J.**

27. Fill out the **Fugitive Emissions Data Summary Sheet** and provide it as **Attachment K.** Not applicable

28. Check all applicable **Emissions Unit Data Sheets** listed below:

☐ Bulk Liquid Transfer Operations	☐ Haul Road Emissions	☐ Quarry
☐ Chemical Processes	☐ Hot Mix Asphalt Plant	☐ Solid Materials Sizing, Handling and Storage Facilities
☐ Concrete Batch Plant	☐ Incinerator	☐ Storage Tanks
☐ Grey Iron and Steel Foundry	☐ Indirect Heat Exchanger	

☒ General Emission Unit, specify:

KMC currently operates an existing rotary wood dryer (003-01) and multi hearth retort furnace (003-02) that are used to produce char. Emissions from the dryer/furnace are controlled by cyclones (C-05, C-06, C-07) and an after combustion chamber (C-08). Char production is capped by the operating permit at 4.5 tons per hour and 28,000 tons per year. Wood throughput is capped at 36 tons per hour, wet and 18 tons per hour, dry. KMC intends to increase annual char production to a maximum 5.0 tons per hour and 32,000 tons per year. KMC also intends to increase wood throughput to 40 tons per hour, wet and 20 tons per hour, dry. No physical modifications will be made to the dryer, retort, or their respective emission control devices.

Fill out and provide the **Emissions Unit Data Sheet(s)** as **Attachment L.**

29. Check all applicable **Air Pollution Control Device Sheets** listed below:

☐ Absorption Systems	☐ Baghouse	☐ Flare
☐ Adsorption Systems	☐ Condenser	☒ Mechanical Collector
☒ Afterburner	☐ Electrostatic Precipitator	☐ Wet Collecting System

☐ Other Collectors, specify

Fill out and provide the **Air Pollution Control Device Sheet(s)** as **Attachment M.**

30. Provide all **Supporting Emissions Calculations** as **Attachment N,** or attach the calculations directly to the forms listed in Items 28 through 31.

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.**

- 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.

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.

33**. Business Confidentiality Claims.** Does this application include confidential information (per 45CSR31)?

☐ **YES** ☒ **NO**

- 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.**

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 Carey Preston *(Please use blue ink)* DATE: 6/22/2016 *(Please use blue ink)*

35B. Printed name of signee: Carey Preston		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:

- ☒ **Attachment A: Business Certificate**
- ☒ **Attachment B: Map(s)**
- ☐ **Attachment C: Installation and Start Up Schedule**
- ☒ **Attachment D: Regulatory Discussion**
- ☒ **Attachment E: Plot Plan**
- ☒ **Attachment F: Detailed Process Flow Diagram(s)**
- ☒ **Attachment G: Process Description**
- ☒ **Attachment H: Material Safety Data Sheets (MSDS)**
- ☒ **Attachment I: Emission Units Table**
- ☒ **Attachment J: Emission Points Data Summary Sheet**
- ☐ **Attachment K: Fugitive Emissions Data Summary Sheet**
- ☒ **Attachment L: Emissions Unit Data Sheet(s)**
- ☐ **Attachment M: Air Pollution Control Device Sheet(s)**
- ☒ **Attachment N: Supporting Emissions Calculations**
- ☐ **Attachment O: Monitoring/Recordkeeping/Reporting/Testing Plans**
- ☒ **Attachment P: Public Notice**
- ☐ **Attachment Q: Business Confidential Claims**
- ☒ **Attachment R: Authority Forms**
- ☒ **Attachment S: Title V Permit Revision Information**
- ☒ **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 46
BERYL, WV 26726-0000

BUSINESS REGISTRATION ACCOUNT NUMBER: **1052-8040**

This certificate is issued on: 06/8/2011

This certificate is issued by
the West Virginia State Tax Commissioner
in accordance with Chapter 11, Article 12, of the West Virginia Code

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.

atL006 v.4
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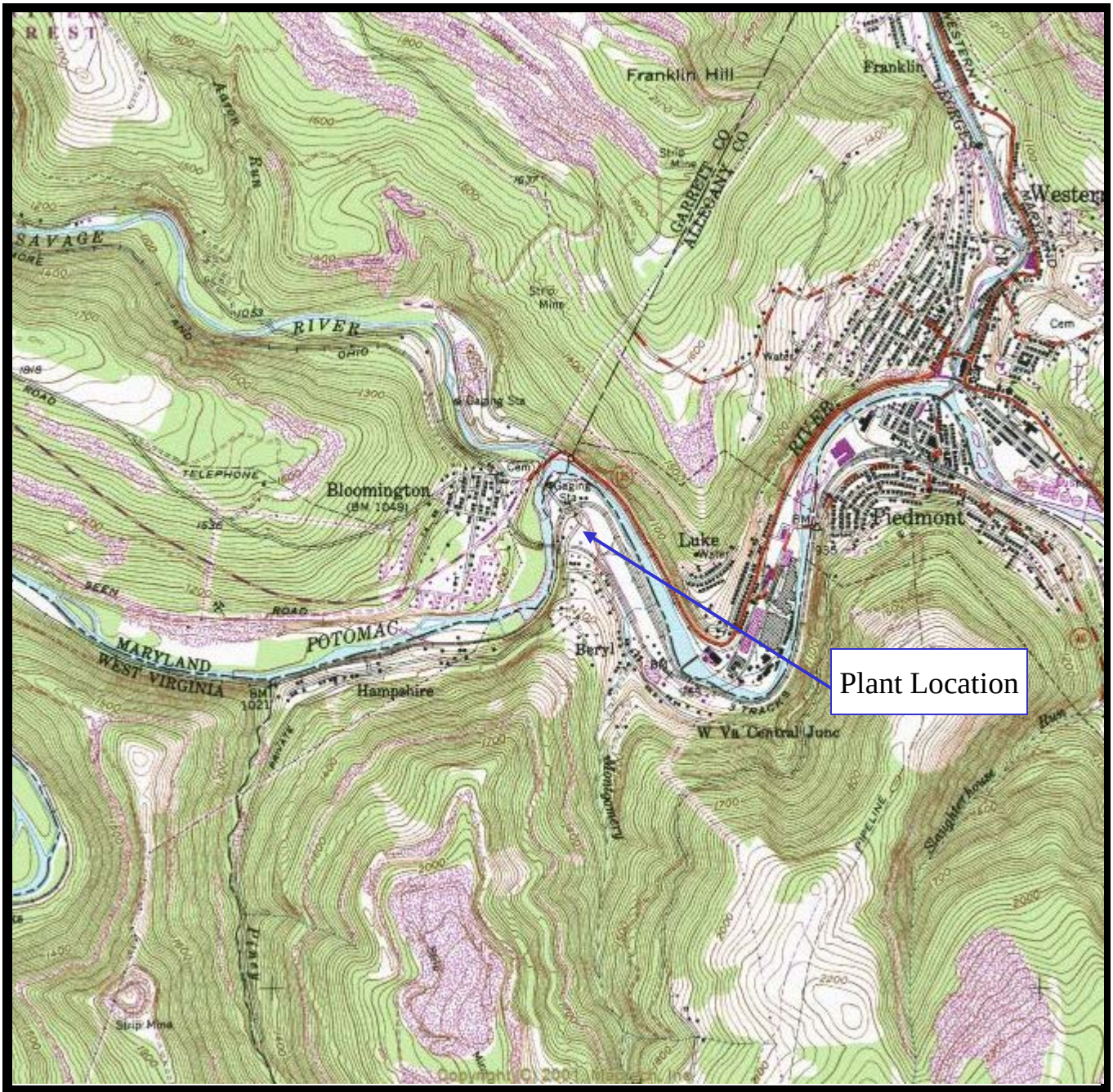
ATTACHMENT B
AREA MAP



Liberty Environmental, Inc.

50 N. Fifth Street, 5th floor
Reading, PA 19601
Phone: 610-375-9301
Fax: 610-375-9302

NORTH

ATTACHMENT B: SITE LOCATION MAP

BERYL PLANT

KINGSFORD MANUFACTURING COMPANY

USGS MAP QUADRANGLE: WESTERNPORT, MD

SCALE : 1" = 2000 FEET

0 2000 4000

ATTACHMENT C
INSTALLATION AND STARTUP SCHEDULE – NOT APPLICABLE

ATTACHMENT D
REGULATORY DISCUSSION

ATTACHMENT D – REGULATORY DISCUSSION

KMC currently operates an existing rotary wood dryer (003-01) and multi-hearth retort furnace (003-02) that are used to produce char. The dryer/furnace are equipped with product recovery cyclones and an after combustion chamber (C-08). Char production is capped by the operating permit at 4.5 tph (30-day average) and 28,000 tpy (12-month rolling average). Wood throughput is capped at 36 tph (wet) and 18 tph (dry). KMC is requesting an increase in the annual char production cap to a maximum of 32,000 tpy. KMC also requests that the hourly char rate be increased to 5 tph (30-day average) and that the wood throughput be increased to 40 tph (wet) and 20 tph (dry). No physical modifications will be made to the dryer, retort furnace, or their respective emission control devices. The dryer and retort furnace are capable of producing char at a higher rate than 4.5 tph and the increase in annual char production will be accomplished by increasing operating hours.

The rotary dryer and multi-hearth retort furnace will continue to be subject to the applicable control device, monitoring, recordkeeping and reporting requirements listed in the current operating permit (R30-05700003-2012). This permit application requests increases in the hourly and annual char production/wood throughputs specified in Conditions 4.1.1, 5.1.1 and 5.1.2 of the current permit. In addition, the following revisions to hourly and annual ACC stack emission limits in Condition 6.1.1 are requested:

ACC Permit Limits
Requested Revisions for Char Production Increases
Kingsford Manufacturing Company, Beryl, WV

Pollutant	Current ACC Permit Limits[1]		Proposed ACC Permit Limits		Net Proposed Increases	
	lbs/hr	***tons/year***	***lbs/hr***	***tons/yr***	***lbs/hr***	***tons/yr***
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PM_{10}	29.4	94.9	33.9	108	4.5	13.1
SO_2	17	42	17[2]	48	--[2]	6
VOC	2.52	8.1	2.9	9	0.4	0.9

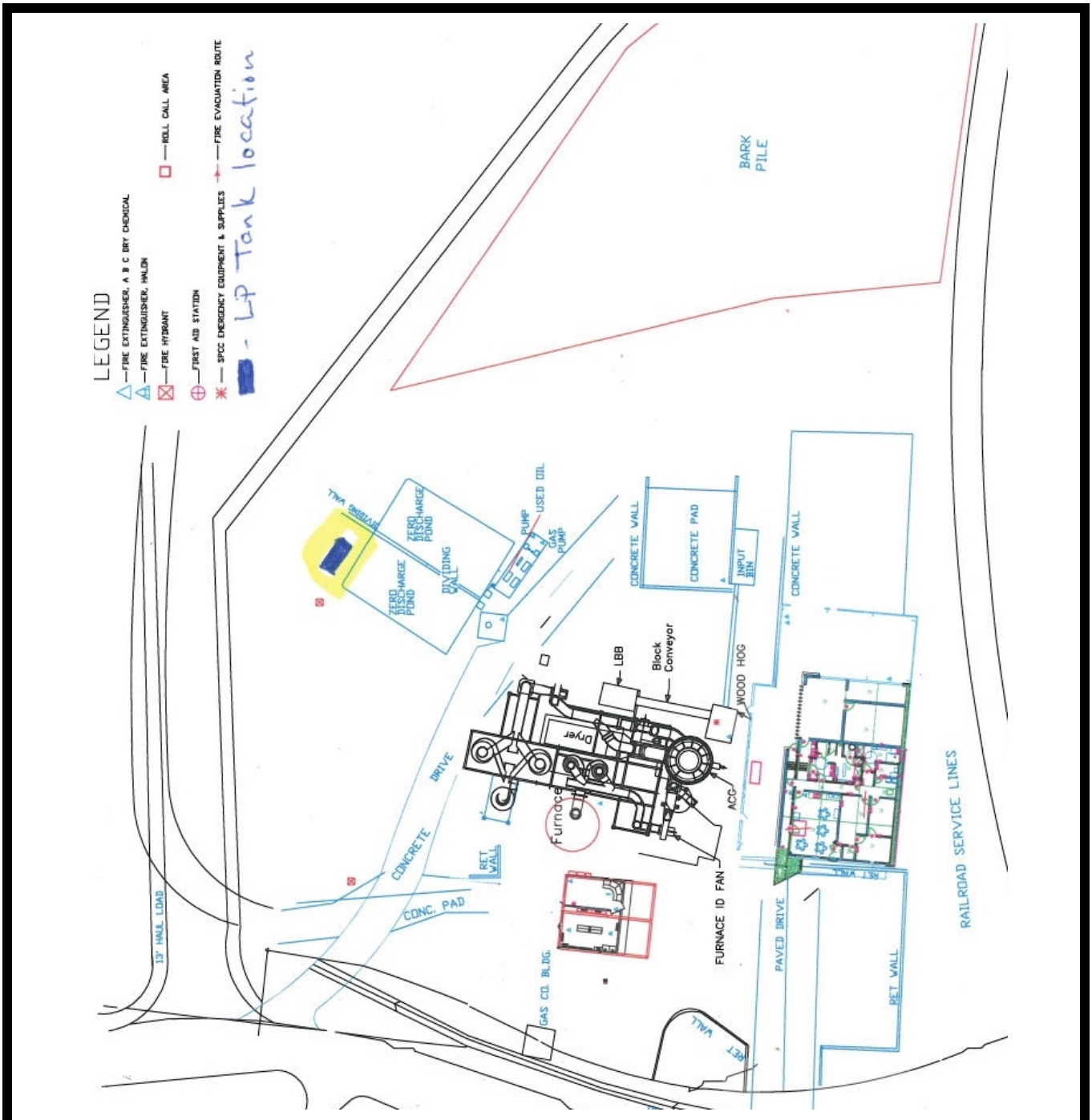
(1) After Combustion Chamber (ACC) emission limits specified in Condition 6.1.1 of R30-05700003-2012
(2) Note that hourly permit limits for NO_x and SO_2 were established using higher "short-term" emission factors. No increases in these limits are being requested.

Because requested increases of allowable NO_x and PM_{10} emissions exceed 10 tpy, KMC is submitting this R13 permit application for an NSR modification.

Attachment N provides an "actual to potential" emissions inventory that compares the requested revised annual facility-wide emissions associated with the 32,000 tpy char cap with the baseline 1994/1995 actual average annual emissions. The baseline emissions are identical to those presented in the 1997 NSR R13 construction permit application and are based on actual char production rates in the 1994/1995 period and the "lb/ton char" emissions factors derived from the 1995/1996 stack tests. Note that baseline PM/PM10 emissions were "corrected" by lowering them to the allowable levels in the WV Regulation 7 "process weight" rule as required by 45-14-2.8.b.3. Potential emissions associated with the proposed annual char production cap are used in lieu of "projected actual" emissions in accordance with 45-14-2.63.a.4.

The emissions inventory provided in Attachment N demonstrates that the requested increase in char production will not result in significant emissions increase above the baseline 1994/1995 levels. This "actual to potential" emissions evaluation demonstrates that the requested "relaxation" of the current federally enforceable limit on annual char production will not result in a major modification as required by 45-14-19.7.

ATTACHMENT E
PLOT PLAN



Liberty Environmental, Inc.

50 N. Fifth Street, 5th Floor
Reading, PA 19601
Phone: 610-375-9301
Fax: 610-375-9302

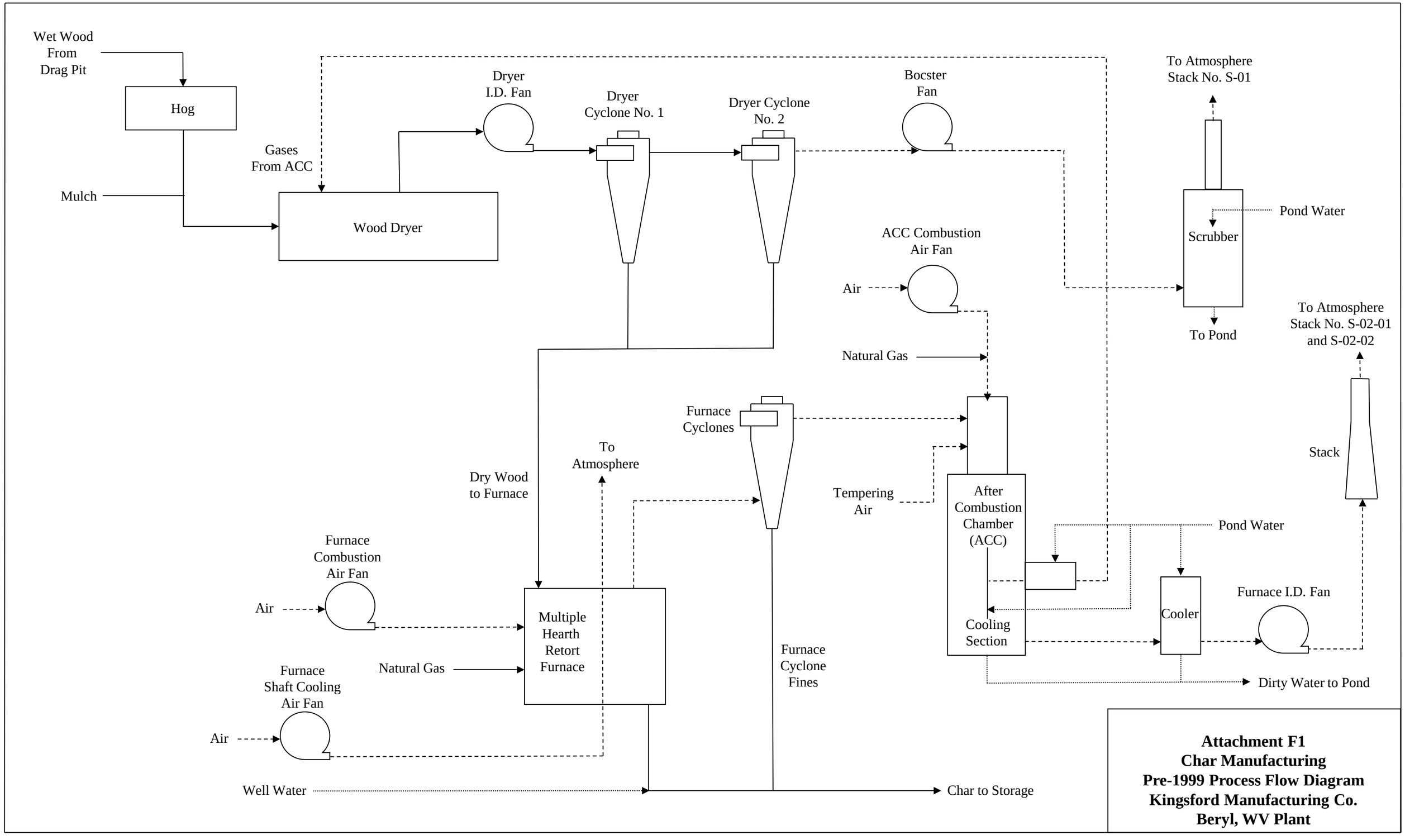
NORTH

ATTACHMENT E: PLOT PLAN

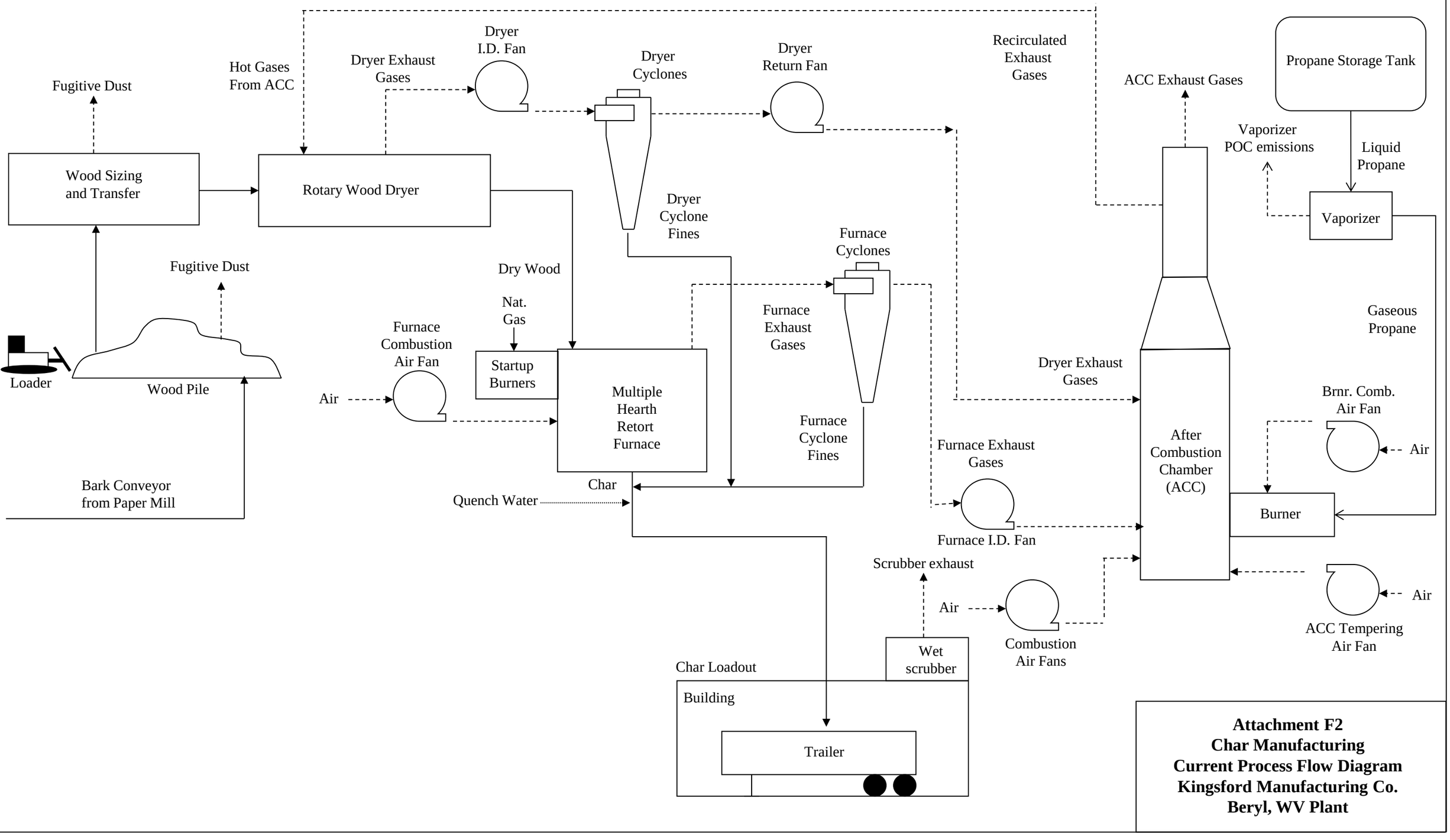
BERYL PLANT

KINGSFORD MANUFACTURING COMPANY

ATTACHMENT F
PROCESS FLOW DIAGRAM



Attachment F1
Char Manufacturing
Pre-1999 Process Flow Diagram
Kingsford Manufacturing Co.
Beryl, WV Plant



Attachment F2
Char Manufacturing
Current Process Flow Diagram
Kingsford Manufacturing Co.
Beryl, WV Plant

ATTACHMENT G
PROCESS DESCRIPTION

ATTACHMENT G – PROCESS DESCRIPTION

Kingsford Manufacturing Company (KMC) owns and operates a charcoal manufacturing facility located in Beryl, West Virginia. The Beryl Plant produces char from bark and sawdust raw materials. The bark and sawdust is sized, dried in a rotary dryer and then charred in a multi-hearth retort furnace. The dryer and the furnace air emissions are controlled by cyclone collectors which are exhausted to a common after combustion chamber (ACC) for oxidation. Air emissions from the ACC stack are subject to emissions limits in Permit R13-2117D. The char is quenched and conveyed into covered trucks for transport to the Kingsford Parsons, WV plant for charcoal manufacturing.

KMC currently operates an existing rotary wood dryer (003-01) and multi hearth retort furnace (003-02) that are used to produce char. The dryer/furnace are equipped with cyclones and an after combustion chamber (C-08). Char production is capped by the operating permit at 4.5 tons per hour and 28,000 tons per year. Wood throughput is capped at 36 tons per hour, wet and 18 tons per hour, dry. KMC intends to increase annual char production to a maximum 5.0 tons per hour and 32,000 tons per year. KMC also intends to increase wood throughput to 40 tons per hour, wet and 20 tons per hour, dry. No physical modifications will be made to the dryer, retort, or their respective emission control devices. A process flow diagram for the facility is provided in Attachment F. Potential emission calculations are provided in Attachment N

ATTACHMENT H
MSDS INFORMATION

The Clorox Company
7200 Johnson Drive
Pleasanton, California 94566
Tel. (415) 047-6100

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 Bannock Street Denver, CO 80204-4507

II Health Hazard Data

Irritating to the eyes, skin and respiratory tract. Possible sensitizer. Inhalation may produce asthma, cough, congestion, itching and bleeding of the nose and sneezing. FIRST AID: EYE CONTACT: flush immediately with water for at least 15 minutes. See a doctor if irritation persists. SKIN CONTACT: low hazard. INGESTION: low hazard. Drink 2 to 3 glasses of water. INHALATION: 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.

III Hazardous Ingredients

Ingredient	Concentration	Worker Exposure Limit
Wood dust	varies	
hard wood		1 mg/m^3 TWA
soft wood		5mg/m^3TWA; 10mg/m^3STEL

TWA = Time Weighted Average. Exposure should not be exceeded when averaged over a normal 8-hour workday and 40-hour workweek. Source: ACGIH, 1984.
STEL = Short Term Exposure Level. Exposure must not exceed the stated limit during the allowable 15 minute excursion period. Source: ACGIH, 1984.
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.

IV Fire and Explosion Data

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.

V Special Protection Information

Ventilation is recommended to keep the wood dust in the workroom air below 1 mg/m^3. 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.

VI Spill or Leak Procedures

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.

VII Reactivity Data

Stable. Incompatible with oxidizers (peroxides, perchlorates, hypochlorite, perborates).

VIII Special Precautions

Minimize skin and eye contact. Avoid inhalation.

IX Physical Data

None.

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

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.

Individuals with pulmonary and/or respiratory disease should avoid exposure to dust.

FIRST AID:

EYE CONTACT: Flush eyes thoroughly with water for at least 15 minutes. If irritation persists, call a physician.

SKIN CONTACT: Wash skin with soap and water.

INGESTION: Drink a glassful of water. Call a physician.

INHALATION: Remove to fresh air. If irritation or breathing problems persist, call a physician.

III Hazardous Ingredients

Ingredient	Concentration	Worker Exposure Limit
Char dust CAS # 16291-96-6	varies	2 mg/m^3 - TLV-TWA[a,b] (respirable dust)

[a]TLV-TWA = ACGIH Threshold Limit Value-Time Weighted Average.

[b]Based on the ACGIH TLV-TWA for coal dust.

None of the materials in this product are on the IARC, OSHA, or NTP carcinogen lists.

IV Special Protection and Precautions

Hygienic Practices: Wash hands after direct contact.

Engineering Controls: Use local exhaust to minimize exposure to dust.

Personal Protective Equipment: Wear safety glasses and gloves. Use NIOSH-approved respirator under conditions where TLV limits may be exceeded.

V Transportation and Regulatory Data

DOT Proper Shipping Name: Spontaneously combustible material.

EPA - SARA Title III/CERCLA: This product is a hazardous chemical reportable under Sections 311/312 and contains no chemicals regulated under Section 313 or under Section 304/CERCLA.

VI Spill Procedures/Waste Disposal

Spill Procedures: Remove heat and ignition sources. Vacuum sweep, if necessary, to avoid generating airborne dust. Wash residual to on-site treatment area, where appropriate.

Waste Disposal: Reclaim, if possible; otherwise, dispose of in accordance with all applicable federal, state, and local regulations.

VII Reactivity Data

Stable under normal use and storage conditions.

Avoid contact with oxidizing agents, heat sources, and ignition sources.

VIII Fire and Explosion Data

Explosion Hazard: Mixtures of fine particles with air may form a potentially explosive mixture.

Fire Extinguishing Agents: Dry chemical, carbon dioxide (CO_2), foam, or water spray.

IX Physical Data

Bulk density ..... ~0.5 g/mL

ATTACHMENT I
EMISSION UNITS TABLE

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)

Emission Unit ID[1]	Emission Point ID[2]	Emission Unit Description	Year Installed/ Modified	Design Capacity	Type[3] and Date of Change	Control Device[4]
003-01	S-02	Rotary Wood Dryer	1998	40 tph wet wood	Increase maximum annual char production to 5 tph and 32,000 tpy, increase wood throughput to 40 tph, wet and 20 tph dry.	After Combustion Chamber (ACC) C-08
03-002	S-02	Multi-hearth Retort Furnace	Installed 1962 Modified 1997	5.0 tph char 20 tph wet wood	Increase maximum annual char production to 5 tph and 32,000 tpy, increase wood throughput to 40 tph, wet and 20 tph dry.	ACC C-08

[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. *(Must match Emission Units Table & Plot Plan)*	Emission Point Type[1]	Emission Unit Vented Through This Point *(Must match Emission Units Table & Plot Plan)*		Air Pollution Control Device *(Must match Emission Units Table & Plot Plan)*		Vent Time for Emission Unit *(chemical processes only)*		All Regulated Pollutants - Chemical Name/CAS[3] *(Speciate VOCs & HAPS)*	Maximum Potential Uncontrolled Emissions[4]		Maximum Potential Controlled Emissions[5]		Emission Form or Phase *(At exit conditions, Solid, Liquid or Gas/Vapor)*	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-02	Vertical – no cap	03-001,002	Rotary wood dryer and retort furnace	C-08	After combustion chamber (ACC)	N/A	N/A	NOx CO VOC SO2 PM PM10 PM2.5 CO2 Methane N2O Methanol	See Attachment N				PM/PM10/ PM2.5 - Solid Particulate All others - gas	EE	N/D

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, CS_2, VOCs, H_2S, Inorganics, Lead, Organics, O_3, NO, NO_2, SO_2, SO_3, all applicable Greenhouse Gases (including CO_2 and methane), etc. **DO NOT LIST** H_2, H_2O, N_2, O_2, 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/m^3) at standard conditions (68 °F and 29.92 inches Hg) (see 45CSR7). If the pollutant is SO_2, use units of ppmv (See 45CSR10).

Attachment J
EMISSION POINTS DATA SUMMARY SHEET

Table 2: Release Parameter Data								
Emission Point ID No. *(Must match Emission Units Table)*	Inner Diameter (ft.)	Exit Gas			Emission Point Elevation (ft)		UTM Coordinates (km)	
		Temp. (^{o}F)	Volumetric Flow [1] (acfm) *at operating conditions*	Velocity (fps)	Ground Level *(Height above mean sea level)*	Stack Height [2] *(Release height of emissions above ground level)*	Northing	Easting
S-02		1,800	368,970				N/D	N/D

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

ATTACHMENT K
FUGITIVE EMISSION DATA SUMMARY SHEET – NOT APPLICABLE

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*):

1. Name or type and model of proposed affected source:

003-01 Rotary wood dryer (Heil SD-105-32)
003-02 Multi-hearth retort furnace (Nichols-Herreshoff)

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.

3. Name(s) and maximum amount of proposed process material(s) charged per hour:

003-01 40 tph wet wood
003-02 N/D

4. Name(s) and maximum amount of proposed material(s) produced per hour:

003-01 N/D
003-02 5.0 tph char, 32,000 tpy

5. Give chemical reactions, if applicable, that will be involved in the generation of air pollutants:

003-01 N/A
003-02 Pyrolysis of wood

* 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):

(a) Type and amount in appropriate units of fuel(s) to be burned:

003-01 N/A
03-002 One (1)1 40 MMBtu/hr propane-fired low NOx ACC burner, 6 (six) 4 MMBtu/hr each natural gas-fired retort burners

(b) Chemical analysis of proposed fuel(s), excluding coal, including maximum percent sulfur and ash:

Propane and Natural gas both have negligible sulfur and ash content

(c) Theoretical combustion air requirement (ACF/unit of fuel):

N/D @ °F and psia.

(d) Percent excess air:

(e) Type and BTU/hr of burners and all other firing equipment planned to be used:

003-01 N/A
03-002 One (1)1 40 MMBtu/hr propane-fired low NOx ACC burner, 6 (six) 4 MMBtu/hr each natural gas-fired retort burners

(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:

N/A

(g) Proposed maximum design heat input: 44 MMBtu/hr × 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

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.

9. 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 emissions from the drying and charring operations in accordance with the requirements of the existing Title V operating permit.

RECORDKEEPING

KMC will calculate and record emissions and throughputs from the drying and charring operations in accordance with the requirements of the existing Title V operating permit. Char production rates will be recorded monthly based on records of truck weights from the Parsons plant.

REPORTING

KMC will report emissions from the drying and charring operations in accordance with the requirements of the existing Title V operating permit.

TESTING

KMC will conduct emissions testing of the ACC outlet in accordance with the requirements of the existing Title V operating permit.

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.

RECORDKEEPING. PLEASE DESCRIBE THE PROPOSED RECORDKEEPING THAT WILL ACCOMPANY THE MONITORING.

REPORTING. PLEASE DESCRIBE THE PROPOSED FREQUENCY OF REPORTING OF THE RECORDKEEPING.

TESTING. PLEASE DESCRIBE ANY PROPOSED EMISSIONS TESTING FOR THIS PROCESS EQUIPMENT/AIR POLLUTION CONTROL DEVICE.

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

Not applicable

ATTACHMENT M
AIR POLLUTION CONTROL DEVICE SHEET – NOT APPLICABLE, NO CHANGES

ATTACHMENT N
SUPPORTING EMISSION CALCULATIONS

TABLE N-1
FACILITY ACTUAL TO POTENTIAL EMISSIONS PROPOSED INCREASES - SUMMARY
KINGSFORD MANUFACTURING CO. - BERYL, WEST VIRGINIA

Source	1994/1995 Baseline Actual Emissions (tons/yr)[a]						
	NO_x	CO	VOC	SO_2	PM	PM_{10}[b]	$PM_{2.5}$
Wood Pile Management and Traffic					5.10	2.40	0.36
Material Handling					1.72	1.64	0.66
Drying and Charring	174.20	78.60	129.10	11.70	149.00	149.00	99.83
Plant Roadways					5.36	2.55	0.26
Total	174.20	78.60	129.10	11.70	161.10	154.90	101.11

[a]Baseline emissions indentified in February 1997 permit application based on stack testing conducted at the Beryl Plant.
[b]Charring PM2.5/PM10 ratio of 0.67 based on testing data at the Beryl Plant after the 1999 modifications. Wood Pile/Material Handling/Plant Roadway PM2.5/PM10 ratio assumed identical to the projected emissions.

Source	Projected Potential Emissions (tons/yr) @ 32ktpy Char Production						
	NO_x	CO	VOC	SO_2	PM	PM_{10}	$PM_{2.5}$
Wood Pile Management and Traffic					5.65	2.65	0.40
Material Handling					0.78	0.51	0.30
Drying and Charring	208.00	32.94	9.26	48.00	160.00	108.46	80.00
Plant Roadways					1.20	0.24	0.06
Total	208.00	32.94	9.26	48.00	167.63	111.86	80.75
ACC Emission Factors (lbs/ton)[c] - proposed	13.00	2.06	0.58	3.00	10.00	6.78	5.00
ACC Emission Factors (lbs/ton) - current permit	13.00	2.06	0.58	3.00	11.30	6.78	4.62

[c]All emission factors remain the same except PM which is lowered based on stack test data from other KMC plants.

Source	Projected Change (Actual to Potential) Emissions (tons/yr)						
	NO_x	CO	VOC	SO_2	PM	PM_{10}	$PM_{2.5}$
Current Permit Limits (ACC)	182	28.82	8.1	42	158.2	94.9	N/A
Proposed Permit Limits (ACC)	208.00	32.94	9.26	48.00	160.00	108.46	73.95
Increase in Permit Limits (ACC)	26.00	4.12	1.16	6.00	1.80	13.56	N/A
Actual to Potential - Total Plantwide Increases	33.80	-45.66	-119.84	36.30	6.53	-43.04	-20.36
PSD Thresholds	40.00	100.00	40.00	40.00	25.00	15.00	10.00

TABLE N-2
FACILITY BASELINE ACTUAL EMISSIONS
KINGSFORD MANUFACTURING CO. - BERYL, WEST VIRGINIA

Source	1994/1995 Average Annual Emissions (tons/yr)[a]						
	NO_x	CO	VOC	SO_2	PM	PM_{10}	$PM_{2.5}$
Wood Pile Management and Traffic					5.10	2.40	0.36
Material Handling					1.72	1.64	0.66
Drying and Charring	174.20	78.60	129.10	11.70	149.00	149.00	99.83
Plant Roadways					5.36	2.55	0.26
Storage Tanks							
Emergency Generator							
Total	**174.2**	**78.6**	**129.1**	**11.7**	**161.1**	**154.9**	**101.1**

Source	Operating Schedule (hr/yr)	Units	Maximum Annual Production (ton/yr)	Maximum Hourly Production (ton/hr)	Yield (wood:char)	Wood Moisture Content (%)
Wood & Mulch Piles	8,760	Wood (wet)	175,593		4.00	50%
ACC		Wood (dry)	73,934			
ACC	8,760	Char	18,484	4.50		

[a]Baseline emissions indentified in February 1997 permit application based on stack testing conducted at the Beryl Plant.
[b]Charring PM2.5/PM10 ratio of 0.67 based on testing datat at the Beryl Plant after the 1999 modifications. Wood Pile/Material Handling/Plant Roadway PM2.5/PM10 ratio assumed identical to the projected emissions.

TABLE N-3
FACILITY POTENTIAL EMISSIONS - PROJECTED
KINGSFORD MANUFACTURING CO. - BERYL, WEST VIRGINIA

Source	Potential Annual Emissions (tons/yr)[a]							Potential Maximum Hourly Emissions (lbs/hr)[a]						
	NO_x	CO	VOC	SO_2	PM	PM_{10}	$PM_{2.5}$	NO_x	CO	VOC	SO_2	PM	PM_{10}	$PM_{2.5}$
Wood Pile Management and Traffic					5.65	2.65	0.40					1.29	0.61	0.09
Material Handling					0.78	0.51	0.30					0.18	0.12	0.07
Drying and Charring	208.00	32.94	9.26	48.00	160.00	108.46	80.00	65.00	10.29	2.89	15.00	50.00	33.89	25.00
Plant Roadways					1.20	0.24	0.06					0.27	0.05	0.01
Storage Tanks			0.22							0.05				
Emergency Generator	0.06	0.10	0.001	0.00002	0.0005	0.0005	0.0005	1.18	1.98	0.02	0.0003	0.01	0.01	0.01
Total	**208.06**	**33.04**	**9.48**	**48.00**	**167.63**	**111.86**	**80.75**	**66.18**	**12.27**	**2.96**	**15.00**	**51.75**	**34.68**	**25.18**

[a] See Table B-5 through B-13 for emissions calculations.

[b] CO_2e total is total from wood combustion only, no auxiliary fuels

Source	Operating Schedule (hr/yr)	Units	Maximum Annual Production (ton/yr)	Average Hourly Production (ton/hr)	Maximum Hourly Production (ton/hr)	Yield (wood:char)	Wood Moisture Content (%)
Wood Pile	8,760	Wood (wet)	192,000			3.00	50%
		Wood (dry)	96,000				
Mulch Pile	8760	Mulch (wet)	33,900				
		Mulch (dry)	16,950				
ACC	8,760	Char	32,000	3.65	5.00		

TABLE N-4
STORAGE PILE POTENTIAL EMISSIONS - PROJECTED
KINGSFORD MANUFACTURING CO. - BERYL, WEST VIRGINIA

EMISSIONS UNIT NUMBER	EMISIONS POINT NUMBER	NAME OF EMISSIONS UNIT	ANNUAL THROUGHPUT (WET TONS)	ANNUAL THROUGHPUT (DRY TONS)	EMISSION FACTOR[a] (LB/DRY TON)	HOURLY PM EMISS. RATE (LBS)	HOURLY PM_{10} EMISS. RATE (LBS)	HOURLY $PM_{2.5}$ EMISS. RATE (LBS)	ANNUAL PM EMISS. RATE (TONS)	ANNUAL PM_{10} EMISS. RATE (TONS)	ANNUAL $PM_{2.5}$ EMISS. RATE (TONS)
01	01	BARK PILE	192,000	96,000	0.1	1.10	0.52	0.08	4.80	2.26	0.34
	02	MULCH PILE	33,900	16,950	0.1	0.19	0.09	0.01	0.85	0.40	0.06
TOTALS						1.29	0.61	0.09	5.65	2.65	0.40

[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 B-6 for details.

TABLE N-5
MATERIAL HANDLING POTENTIAL EMISSIONS - PROJECTED
KINGSFORD MANUFACTURING CO. - BERYL, WEST VIRGINIA

EMISSIONS UNIT NUMBER	EMISIONS POINT NUMBER	NAME OF EMISSIONS UNIT	ANNUAL TPY/NORMAL CFM (WET TONS)	PM EMISSION FACTOR[a] (LB/WET TON) (GR/CF)	PM_{10} EMISSION FACTOR[a] (LB/WET TON) (GR/CF)	$PM_{2.5}$EMISSION FACTOR[a] (LB/WET TON) (GR/CF)	CONTROL FACTOR	HOURLY PM EMISS. RATE (LBS)	HOURLY PM_{10} EMISS. RATE (LBS)	HOURLY $PM_{2.5}$ EMISS. RATE (LBS)	ANNUAL PM EMISS. RATE (TONS)	ANNUAL PM_{10} EMISS. RATE (TONS)	ANNUAL $PM_{2.5}$ EMISS. RATE (TONS)
02	01	TRANSFER BY FRONT-END LOADER TO HOPPER OR TRUCK	225,900	9.19E-04	4.35E-04	6.59E-05	0	0.023710804	0.011214569	0.001698206	0.104	0.049	0.007
02	02	HOPPER REVERSE CHAIN TO GROUND	225,900	9.19E-04	4.35E-04	6.59E-05	0	0.023710804	0.011214569	0.001698206	0.104	0.049	0.007
02	03	HOPPER TO 48" BELT	225,900	9.19E-04	4.35E-04	6.59E-05	0	0.023710804	0.011214569	0.001698206	0.104	0.049	0.007
02	04	48" BELT INTO HOG	225,900	9.19E-04	4.35E-04	6.59E-05	0	0.023710804	0.011214569	0.001698206	0.104	0.049	0.007
02	05	SCRAPE BOTTOM OF 48" BELT TO GROUND	226	9.19E-04	4.35E-04	6.59E-05	0	2.37108E-05	1.12146E-05	1.69821E-06	0.000	4.91E-05	7.44E-06
02	06	BLOCK CONVEYOR TO LIVE BOTTOM BIN	192,000	9.19E-04	4.35E-04	6.59E-05	0	0.020152609	0.009531639	0.001443363	0.088	0.042	0.006
02	07	MULCH CHUTE TO GROUND	33,900	9.19E-04	4.35E-04	6.59E-05	0	0.003558195	0.00168293	0.000254844	0.016	0.007	0.001
02	08	WOOD BYPASS SCREW TO HOPPER	107	9.19E-04	4.35E-04	6.59E-05	0	1.11959E-05	5.29536E-06	8.01868E-07	4.90E-05	2.32E-05	3.51E-06
SUBTOTAL								0.119	0.056	0.008	0.519	0.246	0.037
02	09	CHAR TO TRAILER	700	0.1	0.1	0.1	0.9	0.06	0.06	0.06	0.263	0.263	0.263
TOTALS								0.18	0.12	0.07	0.78	0.51	0.30

[a]PM, PM_{10} and $PM_{2.5}$ emission factors estimated per AP-42, Section 13.2.4 (11/06)
Emissions Factor = Particle Size Multiplier x 0.0032 x (Wind Speed/5)$^{1.3}$ / (Moisture Content/2)$^{1.4}$
per AP-42, Section 13.2.4.
Particle size multiplier = 0.74 for PM_{30}, 0.35 for PM_{10}, 0.053 for $PM_{2.5}$.
Wind speed = 6.2 mph
Moisture content conservatively assumed to be similar to coal (4.8%)

TABLE N-6
ACC POTENTIAL EMISSIONS - PROJECTED
KINGSFORD MANUFACTURING CO. - BERYL, WEST VIRGINIA

Emissions Unit Number	Emissions Point Number	Name of Emissions Point	Pollutant	Maximum Annual Char Production (tons/yr)	Maximum Hourly Char Production (tons/hr)	Emission Factor (lbs/ton char)	ACC Stack Emission Rate[a] (lb/hr)	(ton/yr)
03	01/02	Drying/Charring System	NO_x	32,000	5.0	13.0	65.0	208
			CO	32,000	5.0	2.1	10.29	33
			VOC	32,000	5.0	0.6	2.89	9
			SO_2	32,000	5.0	3.0	15	48
			PM	32,000	5.0	10.0	50	160
			PM_{10}	32,000	5.0	6.8	33.9	108
			$PM_{2.5}$	32,000	5.0	5.0	25.0	80

[a] Criteria pollutant ACC emission factors based on current operating permit (R30-05700003-2012), except PM which was lowered to10.0 . Hourly and annual emissions based on projected maximum hourly throughput and emission factors.

TABLE N-7
PLANT ROAD POTENTIAL EMISSIONS - PROJECTED
KINGSFORD MANUFACTURING CO. - BERYL, WEST VIRGINIA

Emissions Unit Number	Emissions Point Number	Path	Throughput (tons)	Truck Payload (tons)	Round Trips (#)	Round Trip Distance (miles)	Annual VMT (miles)	Annual Operating Schedule (hours/yr)	Pollutant	Emission Factor (lbs/VMT)[a]	Emission Rate (lb/hr)	Emission Rate (tons/yr)
04	01	Hogfuel Traffic	192,000	7	27,429	0.102	2,805	8,760	PM	0.664	0.213	0.931
								8,760	PM10	0.133	0.043	0.186
								8,760	PM2.5	0.033	0.010	0.046
		Beryl Outbound	32,000	14	2,286	0.140	320	8,760	PM	0.664	0.024	0.106
								8,760	PM10	0.133	0.005	0.021
								8,760	PM2.5	0.033	0.001	0.005
		Mulch Lower End (Dirty)	22,600	20	1,130	0.106	120	8,760	PM	0.664	0.009	0.040
								8,760	PM10	0.133	0.002	0.008
								8,760	PM2.5	0.033	0.000	0.002
		Mulch Lower End (Clean)	22,600	20	1,130	0.091	103	8,760	PM	0.664	0.008	0.034
								8,760	PM10	0.133	0.002	0.007
								8,760	PM2.5	0.033	0.000	0.002
		Mulch Upper End	11,300	20	565	0.303	171	8,760	PM	0.664	0.013	0.057
								8,760	PM10	0.133	0.003	0.011
								8,760	PM2.5	0.033	0.001	0.003
		Routine Traffic					100	8,760	PM	0.664	0.008	0.033
								8,760	PM10	0.133	0.002	0.007
								8,760	PM2.5	0.033	0.000	0.002
		Total							PM		0.274	1.201
									PM10		0.055	0.240
									PM2.5		0.013	0.059

[a] Emission factor calculated according to AP-42 Chapter 13.2.1 (1/11), Paved Roads using the equation lb/VMT = $k(sL)^{0.91}$ x $(W)^{1.02}$]where k = particle size multiplier, sL = road surface silt loading in g/m2, and W = average vehicle weight in tons,.
For the Beryl Plant, the following data was used:
sL = 2 g/m2, based on worst case silt loading result of road dust sampling conducted a the KMC Parsons plant.
W = 30 tons (average tractor-trailer weight)
k = 0.011 for PM, 0.0022 for PM_{10}, and 0.00054 for $PM_{2.5}$

TABLE N-8
STORAGE TANK POTENTIAL EMISSIONS - PROJECTED
KINGSFORD MANUFACTURING CO. - BERYL, WEST VIRGINIA

Emissions Unit Number	Emissions Point Number	Name of Emissions Point	Pollutant	Capacity (gal)	Emission Rate[a] (lb/hr)	(ton/yr)
05	01	Gasoline Tank	VOC	1,000	0.05	0.22
05	02	Diesel Tank	VOC	1,000	Neg.	Neg.
					0.05	0.22

[a]Tank emissions calculated based on EPA Tanks 4.0 program and a throughput of 52,000 gallons per year per tank.

TABLE N-9
EMERGENCY GENERATOR POTENTIAL EMISSIONS - PROJECTED
KINGSFORD MANUFACTURING CO. - BERYL, WEST VIRGINIA

Emissions Unit Number	Emissions Point Number	Rated Capacity (MMBtu/hr)[a]	Annual Operating Schedule (hr/yr)	Pollutant	Emissions Factors[b] (lbs/MMBtu)	Emissions (lbs/hr)	Emissions (tons/yr)
06	01	0.53	100	NOx	2.21	1.18	0.06
		0.53	100	CO	3.72	1.98	0.10
		0.53	100	VOC	0.0296	0.0158	0.0008
		0.53	100	$TPM/PM_{10}/PM_{2.5}$[b]	0.0194	0.0103	0.0005
		0.53	100	SO_2	5.88E-04	3.13E-04	1.57E-05
		HAPS					
		0.53	100	1,1,2,2- Tetrachloroethane	2.53E-05	1.35E-05	6.74E-07
		0.53	100	1,1,2-Trichloroethane	1.53E-05	8.15E-06	4.07E-07
		0.53	100	1.3-Butadiene	6.63E-04	3.53E-04	1.77E-05
		0.53	100	1,3-Dichloropropene	1.27E-05	6.76E-06	3.38E-07
		0.53	100	Acetaldehyde	2.79E-03	1.49E-03	7.43E-05
		0.53	100	Acrolein	2.63E-03	1.40E-03	7.00E-05
		0.53	100	Benzene	1.58E-03	8.41E-04	4.21E-05
		0.53	100	Carbon Tetrachloride	1.77E-05	9.42E-06	4.71E-07
		0.53	100	Chlorobenzene	1.29E-05	6.87E-06	3.43E-07
		0.53	100	Chloroform	1.37E-05	7.29E-06	3.65E-07
		0.53	100	Ethylbenzene	2.48E-05	1.32E-05	6.60E-07
		0.53	100	Ethylene Dibromide	2.13E-05	1.13E-05	5.67E-07
		0.53	100	Formaldehyde	2.05E-02	1.09E-02	5.46E-04
		0.53	100	Methanol	3.06E-03	1.63E-03	8.15E-05
		0.53	100	Methylene Chloride	4.12E-05	2.19E-05	1.10E-06
		0.53	100	Napthalene	9.71E-05	5.17E-05	2.58E-06
		0.53	100	PAHs	1.41E-04	7.51E-05	3.75E-06
		0.53	100	Styrene	1.19E-05	6.34E-06	3.17E-07
		0.53	100	Toluene	5.58E-04	2.97E-04	1.49E-05
		0.53	100	Vinyl Chloride	7.18E-06	3.82E-06	1.91E-07
		0.53	100	Xylene	1.95E-04	1.04E-04	5.19E-06
Total HAPS						**1.73E-02**	**8.63E-04**

[a] Based on maximum fuel consumption of 522 c.f. and hour at 100% load.
[b]Emission factors from U.S, EPA AP-42 Chapter 3.2, Natural Gas-fired Rich-Burn 4-stroke Reciprocating Engines.
[c]assumes all particulate matter is less than 1 µm as per EPA AP-42 Section 3.2 Table 3.2-3.

TABLE N-10
CHARRING SYSTEM METHANOL EMISSIONS - PROJECTED
KINGSFORD MANUFACTURING CO. - BERYL, WEST VIRGINIA

Emissions Unit Number	Emissions Point Number	Source	Pollutant	Maximum Annual Char Production (tons/yr)	Maximum Hourly Char Production (tons/hr)	Emission Factor[a] (lb/ton wood)	ACC Stack Emission Rate	
							(lb/hr)	(ton/yr)
03	01/02	Charring System/Briquet Drying Operations	Methanol	32,000	5.0	0.015	0.08	0.24

[a] Emission factor based on 150 lb methanol per ton of char EPA AP-42 Section 10.7 for uncontrolled batch charcoal kilns with ACC methanol destruction efficiency assumed to be 99.99% based on high ACC residence time and temperatures.

TABLE N-11
FACILITY LEAD EMISSIONS - PROJECTED
KINGSFORD MANUFACTURING CO. - BERYL, WEST VIRGINIA

Emissions Unit Number	Emissions Point Number	Source	Maximum Hourly PM Emissions (lb/hr)	Maximum Annual PM Emissions (tons/yr)	Maximum Pb Concentration (ppm)	Emission Factor[a] (lb Pb/lb PM)	Pb Emission Rate (lb/hr)	Pb Emission Rate (ton/yr)	Particulate Matter Characteristics
03	01/02	Charring System/ACC	50	160.0	53.33	5.3E-05	2.67E-03	0.009	All particulate emissions assumed to be char ash
02	09	Char Truck Loadout	0.06	0.26	8.00	8.00E-06	4.80E-07	2.10E-06	
02	01-08	Wood Receipt	0.12	0.52	2.00	2.00E-06	2.37E-07	1.04E-06	All particulate emission assumed to be wood dust
01	01/02	Wood Storage	1.29	5.65	2.00	2.00E-06	2.58E-06	1.13E-05	All particulate emission assumed to be wood dust
			Maximum Hourly Fuel Consumption (scf/hr)	**Annual Operating Schedule (hr/yr)**	**Maximum Annual Fuel Consumption (scf/yr)**	**Emission Factor[a] ($lb/10^6 scf$)**			
06	01	Emergency Generator	522	100	52200	5.00E-04	2.61E-07	1.31E-08	
		Total					0.0027	0.009	

[a]Emission 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 4 (8 ppm = 2ppm * 4)
Char ash content assumed to be 15%, ACC PM assumed to be char ash (80 ppm = 8 ppm / .15).
Natural Gas Emission Factotor from AP-42 Chapter 1.4, Table 1.4-2.

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 Modification Permit for an increase in annual char production at the charcoal manufacturing plant located adjacent to WV Route 46 near the WV-Maryland border, slightly west of the town of Luke, MD in Mineral County, WV. The latitude and longitude coordinates are: 39.477295 and -79.066496.

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

Pollutant	Emissions (tons/year)
NO_x	208.00
CO	32.94
VOC	9.26
SO_2	48.00
PM	167.63
PM_{10}	111.86
$PM_{2.5}$	80.75
Methanol	0.24
Lead	0.009

The production increase is anticipated upon receipt of approval from WVDEP. 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 **June, 2016.**

By: **Kingsford Manufacturing Company**
Carey Preston
Plant Manager
P.O. Box 6
Beryl, WV 21540-0006

ATTACHMENT Q
BUSINESS CONFIDENTIALITY CLAIMS - NOT APPLICABLE

ATTACHMENT R
AUTHORITY OF CORPORATION

Kingsford Manufacturing Company

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
Beryl Retort; Beryl, 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

Angela Hilt
Vice President – Secretary
KINGSFORD MANUFACTURING COMPANY

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: *All applicable requirements are already addressed by the current Title V Operating Permit. The only change is an increase in maximum permitted char production from 28,000 to 32,000 tpy and 4.5 tph to 5.0 tph. Wood throughput will also increase 36 tons/hr wet to40 tons/hr wet and from 18 tons per hour dry to 20 tons per hour, dry.*

☐ SIP	☐ FIP
☒ Minor source NSR (45CSR13)	☐ PSD (45CSR14)
☐ NESHAP (45CSR15)	☐ Nonattainment NSR (45CSR19)
☐ Section 111 NSPS (Subpart(s)_____)	☐ Section 112(d) MACT standards (Subpart(s)_____)
☐ Section 112(g) Case-by-case MACT	☐ 112(r) RMP
☐ Section 112(i) Early reduction of HAP	☐ Consumer/commercial prod. reqts., section 183(e)
☐ Section 129 Standards/Reqts.	☐ Stratospheric ozone (Title VI)
☐ Tank vessel reqt., section 183(f)	☐ Emissions cap 45CSR§30-2.6.1
☐ NAAQS, increments or visibility (temp. sources)	☐ 45CSR27 State enforceable only rule
☐ 45CSR4 State enforceable only rule	☐ Acid Rain (Title IV, 45CSR33)
☐ Emissions Trading and Banking (45CSR28)	☐ Compliance Assurance Monitoring (40CFR64) [(1)]
☐ NO_x Budget Trading Program Non-EGUs (45CSR1)	☐ 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. The drying/charring operations are already subject to CAM.

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 annual char production limit for the retort furnace (003-02) be increased from 28,000 tpy to 32,000 tpy and that the hourly and annual emissions for the After Comubstion Chamber (C-08) be revised to reflect the hourly and annual emissions found in Attachment N.

See attached requested revisions to Conditions 4.1.1, 5.1.1, 5.1.2 and 6.1.1 of the Title V 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
R13-2117D-2002	12/10/2002	
	/ /	
	/ /	

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)*

Note:	*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. 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;

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.

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.

(Signed):	*Not applicable* *(Please use blue ink)*	Date:	_____ / _____ / _____ *(Please use blue ink)*
Named (typed):		Title:	

Note: Please check if the following included (if applicable):

☐	Compliance Assurance Monitoring Form(s)
☒	Suggested Title V Draft Permit Language

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

West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate

Pursuant to
Title V
of the Clean Air Act

Issued to:
Kingsford Manufacturing Company
Beryl Plant
R30-05700003-2012

John A. Benedict
Director

Issued: December 4, 2012 • Effective: December 18, 2012
Expiration: December 4, 2017 • Renewal Application Due: June 4, 2017

4.0 Rotary Wood Dryer Requirements [Emission Point S-02, Emission Unit ID E-03-01]

4.1. Limitations and Standards

4.1.1. The Rotary Wood Dryer, Equipment ID E-03-01, shall process no more than 40 tons of wet wood per hour.
[45CSR13, R13-2117, A.1]

4.1.2. Emissions generated as a result of the operation of the Rotary Wood Dryer shall be routed to and combusted by the After Combustion Chamber, Control Device ID C-08, prior to their release to the atmosphere.
[45CSR13, R13-2117, A.3]

4.1.3. The control devices in the Emission Units Table 1.1 for the Rotary Wood Dryer, shall be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions.
[45CSR§30-5.1.c]

4.1.4. The permittee shall inspect all control systems, specified in the Emission Units Table 1.1 for the Rotary Wood Dryer, weekly to ensure that they are operated and maintained in conformance with their designs.
[45CSR§30-5.1.c]

4.2. Monitoring Requirements

4.2.1. None.

4.3. Testing Requirements

4.3.1. None.

4.4. Recordkeeping Requirements

4.4.1. The permittee shall maintain accurate records on the amount of wet wood charged to the Rotary Wood Dryer.
[45CSR13, R13-2117, B.7]

4.4.2. The permittee shall maintain accurate records on the hours of operation of the Rotary Wood Dryer on a daily basis. According to the facility process specifications, hours of operation of the Rotary Wood Dryer are equivalent to the time to load trailers with finished wood char.
[45CSR§30-5.1.c]

4.4.3. Compliance with the hourly maximum limit [of wet wood charged to the Rotary Wood Dryer] shall be calculated on the basis of a rolling thirty day average expressed in tons per hour based on the hours of production for any specific 30 day period. Said records shall be certified by a responsible official and maintained on site for a period of no less than five (5) years.
[45CSR13, R13-2117, B.7]

4.4.4. Calculation of amount of wood charged to the Rotary Wood Dryer shall be performed as set forth in Section 5.4.4.

5.0 Multi-Hearth Retort Furnace Requirements [Emission Point S-02, Emission Unit ID E-03-02]

5.1. Limitations and Standards

5.1.1. The Multi-Hearth Retort Furnace, Equipment ID E-03-02, shall process no more than 20 tons of dry wood per hour.
[45CSR13, R13-2117, A.2]

5.1.2. The permittee shall produce no more than 5.0 tons of wood char per hour or 32,000 tons of wood char per year.
[45CSR13, R13-2117, A.2]

5.1.3. Emissions generated as a result of the operation of the Multi-Hearth Retort Furnace shall be routed to and combusted by the After Combustion Chamber, Control Device ID C-08, prior to their release to the atmosphere.
[45CSR13, R13-2117, A.3]

5.1.4. The control devices in the Emission Units Table 1.1 for the Multi-Hearth Retort Furnace, shall be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions.
[45CSR§30-12.7]

5.1.5. The permittee shall inspect all control systems, specified in the Emission Units Table 1.1 for the Multi-Hearth Retort Furnace, weekly to ensure that they are operated and maintained in conformance with their designs.
[45CSR§30-5.1.c]

5.2. Monitoring Requirements

5.2.1. None.

5.3. Testing Requirements

5.2.2. None.

5.4. Recordkeeping Requirements

5.4.1. The permittee shall maintain accurate records on the amount of dry wood charged to the Multi-hearth Retort Furnace.
[45CSR13, R13-2117, B.7]

5.4.2. The permittee shall maintain accurate records on the hours of operation of the Multi-hearth Retort Furnace on a daily basis. According to the facility process specifications, hours of operation of the Multi-hearth Retort Furnace are equivalent to the time to load trailers with finished wood char.
[45CSR§ 30-5.1.c]

5.4.3. Compliance with the hourly maximum limit [of the amount of dry wood charged to the Multi-hearth Retort Furnace] shall be calculated on the basis of a rolling thirty day average expressed in tons per hour based on the hours of production for any specific 30 day period. Said records shall be certified by a responsible official and maintained on site for a period of no less than five (5) years.
[45CSR13, R13-2117, B.7]

6.0 After Combustion Chamber Requirements [control device for Emission Point S-02, Control Device ID C-08]

6.1. Limitations and Standards

6.1.1. Emissions generated as a result of the operation of the After Combustion Chamber shall be limited to the following:

Pollutant	Maximum Allowable Emissions (lbs/hr)	Maximum Allowable Emissions (tons/yr)
CO	10.3	33
NO_x	65.7	208
PM	50	160
PM_{10}	33.9	108
SO_2	17	48
VOC	2.9	9

[45CSR13, R13-2117, A.4]

6.1.2. No person shall cause, suffer, allow or permit the emission of particles of unburned or partially burned refuse or ash from any incinerator which are large enough to be individually distinguished in the open air. **[45CSR§6-4.5]**

6.1.3. Incinerators, including all associated equipment and grounds, shall be designed, operated and maintained so as to prevent the emission of objectionable odors. **[45CSR§6-4.6]**

6.2. Monitoring Requirements

6.2.1. **CAM monitoring requirement**. The permittee shall install, calibrate, maintain, and operate a monitoring device (thermocouple) with recorder for the measurement of the ACC combustion chamber temperature. The monitoring device is to be certified by the manufacturer to be accurate within ± one (1) percent in degrees Fahrenheit. Accuracy of each thermocouple will be verified by a second thermocouple in the ACC stack. The validation check shall be conducted monthly. The acceptance criterion is +/- 50 °F. **[45CSR§30-5.1.c and 40C.F.R. §§64.3(a), 64.3(b) and 64.6(c)(2)]**

6.2.2. **CAM monitoring requirement**. Compliance with the hourly emission limits set forth in Requirement 6.1.1. will be demonstrated if the ACC combustion chamber temperature is maintained at or above a minimum of 1,400°F on a 3-hour rolling average during normal operations (not including periods of system startup, shutdown or maintenance).

An excursion shall be defined as: if during normal operation, the 1-hour average ACC temperature drops below 1,450ºF. Excursions trigger an on-screen alarm, an inspection and evaluation, corrective action,