



Allegheny Wood Products  
International, Inc.  
Petersburg, WV  
Mill # 4

Application for NSR Permit  
Modification: Replacement of a  
Lambion 5.99 mmBtu Boiler with a  
Hurst 9.6 mmBtu Boiler.

West Virginia  
Department of  
Environmental Protection  
Division of Air Quality

December 1, 2016

Table of Contents

AWPI  
Petersburg, WV  
Mill #4

Application for  
NSR Permit  
Modification

WVDEP  
Division of  
Air Quality

December 1, 2016

1	Application for NSR Permit Modification
2	Attachment A: Business Certificate
3	Attachment B: Maps
4	Attachment E: Plot Plan
5	Attachment F: Detailed Process Flow Diagram(s)
6	Attachment G: Process Description
7	Attachment I: Emissions Unit Table
8	Attachment J: Emissions Points Data Summary Sheet
9	Attachment L: Emissions Units Data Sheet
10	Attachment M: Air Pollution Control Device Sheet
11	Attachment N: Supporting Emissions Calculations
12	Attachment P: Public Notice
13	Application R: Authority Forms
14	Application Fee
15	CDs

# Tabbed Section 1



WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
**DIVISION OF AIR QUALITY**

601 57<sup>th</sup> Street, SE  
Charleston, WV 25304  
(304) 926-0475  
[www.dep.wv.gov/daq](http://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): Allegheny Wood Products International, Inc.		2. Federal Employer ID No. (FEIN): 27-2895233	
3. Name of facility (if different from above): Plant #4 Petersburg, WV		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 867 240 Airport Rd Petersburg, WV 26847		5B. Facility's present physical address: P. O. Box 130 108 Airport Rd. Petersburg, WV 26847	
6. <b>West Virginia Business Registration.</b> Is the applicant a resident of the State of West Virginia? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO ⇒ If YES, provide a copy of the <b>Certificate of Incorporation/Organization/Limited Partnership</b> (one page) including any name change amendments or other Business Registration Certificate as <b>Attachment A</b> . ⇒ If NO, provide a copy of the <b>Certificate of Authority/Authority of L.L.C./Registration</b> (one page) including any name change amendments or other Business Certificate as <b>Attachment A</b> .			
7. If applicant is a subsidiary corporation, please provide the name of parent corporation:    N/A			
8. Does the applicant own, lease, have an option to buy or otherwise have control of the proposed site? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO ⇒ If YES, please explain: Owns ⇒ If NO, you are not eligible for a permit for this source.			
9. Type of plant or facility (stationary source) to be <b>constructed, modified, relocated, administratively updated or temporarily permitted</b> (e.g., coal preparation plant, primary crusher, etc.): Replacement of a 5.99 mmBtu Boiler with a 9.6 mmBtu Boiler		10. North American Industry Classification System (NAICS) code for the facility: 321113	
11A. DAQ Plant ID No. (for existing facilities only): 023 - 00023		11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only): R30-02300023    R13-1869A	

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

<p>12A.</p> <p>⇒ For <b>Modifications, Administrative Updates</b> or <b>Temporary permits</b> at an existing facility, please provide directions to the <i>present location</i> of the facility from the nearest state road;</p> <p>⇒ For <b>Construction</b> or <b>Relocation permits</b>, please provide directions to the <i>proposed new site location</i> from the nearest state road. Include a <b>MAP</b> as <b>Attachment B</b>.</p> <p>From the intersection of US Route 220 and State Route 28 in Petersburg follow 220 South to Fish Hatchery Road (220/2). Turn right onto Fish Hatchery Road. Follow to Airport Road, turn right onto Airport Road Plant is on the right,</p>		
12.B. New site address (if applicable):	12C. Nearest city or town: Petersburg, WV	12D. County: Grant
12.E. UTM Northing (KM): 660.476	12F. UTM Easting (KM): 4,316.993	12G. UTM Zone: 17
<p>13. Briefly describe the proposed change(s) at the facility:</p> <p>Replacement of a 5.99 mmBtu Boiler with a 9.6 mmBtu Boiler</p>		
<p>14A. Provide the date of anticipated installation or change:     /     / <b>Upon Approval</b></p> <p>⇒ If this is an <b>After-The-Fact</b> permit application, provide the date upon which the proposed change did happen:     /     /</p>		<p>14B. Date of anticipated Start-Up if a permit is granted:                                   /     /</p>
<p>14C. Provide a <b>Schedule</b> of the planned <b>Installation of/Change</b> to and <b>Start-Up</b> of each of the units proposed in this permit application as <b>Attachment C</b> (if more than one unit is involved).</p>		
<p>15. Provide maximum projected <b>Operating Schedule</b> of activity/activities outlined in this application:</p> <p>Hours Per Day   24           Days Per Week   7           Weeks Per Year   52</p>		
<p>16. Is demolition or physical renovation at an existing facility involved?   <input checked="" type="checkbox"/> <b>YES</b>       <input type="checkbox"/> <b>NO</b></p>		
<p>17. <b>Risk Management Plans.</b> If this facility is subject to 112(r) of the 1990 CAAA, or will become subject due to proposed changes (for applicability help see <a href="http://www.epa.gov/ceppo">www.epa.gov/ceppo</a>), submit your <b>Risk Management Plan (RMP)</b> to U. S. EPA Region III.</p>		
<p>18. <b>Regulatory Discussion.</b> List all Federal and State air pollution control regulations that you believe are applicable to the proposed process (<i>if known</i>). 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 (<i>if known</i>). Provide this information as <b>Attachment D</b>.</p>		
<p><b>Section II. Additional attachments and supporting documents.</b></p>		
<p>19. Include a check payable to WVDEP – Division of Air Quality with the appropriate <b>application fee</b> (per 45CSR22 and 45CSR13).</p>		
<p>20. Include a <b>Table of Contents</b> as the first page of your application package.</p>		
<p>21. Provide a <b>Plot Plan</b>, 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 <b>Attachment E</b> (Refer to <b>Plot Plan Guidance</b>).</p> <p>⇒ Indicate the location of the nearest occupied structure (e.g. church, school, business, residence).</p>		
<p>22. Provide a <b>Detailed Process Flow Diagram(s)</b> showing each proposed or modified emissions unit, emission point and control device as <b>Attachment F</b>.</p>		
<p>23. Provide a <b>Process Description</b> as <b>Attachment G</b>.</p> <p>⇒ Also describe and quantify to the extent possible all changes made to the facility since the last permit review (if applicable).</p>		
<p><b>All of the required forms and additional information can be found under the Permitting Section of DAQ's website, or requested by phone.</b></p>		

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**.

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

<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 checked="" type="checkbox"/> Indirect Heat Exchanger	
<input type="checkbox"/> General Emission Unit, specify		

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

<input type="checkbox"/> Absorption Systems	<input type="checkbox"/> Baghouse	<input type="checkbox"/> Flare
<input type="checkbox"/> Adsorption Systems	<input type="checkbox"/> Condenser	<input checked="" type="checkbox"/> Mechanical Collector
<input type="checkbox"/> Afterburner	<input type="checkbox"/> Electrostatic Precipitator	<input type="checkbox"/> Wet Collecting System
<input type="checkbox"/> 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:

<input checked="" type="checkbox"/> Authority of Corporation or Other Business Entity	<input type="checkbox"/> Authority of Partnership
<input type="checkbox"/> Authority of Governmental Agency	<input type="checkbox"/> 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§30-2.2B) 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

*E. Thomas Plaughner*  
(Please use blue ink)

DATE:

12/2/2016  
(Please use blue ink)

35B. Printed name of signee: E. Thomas Plaughner

35C. Title: VP of Operations

35D. E-mail:

tplaughner@alleghenywood.com

36E. Phone:

304-257-1082

36F. FAX:

304-257-9246

36A. Printed name of contact person (if different from above):

John F. DiLorenzo

36B. Title:

Safety and HR Manager

36C. E-mail:

jdilorenzo@alleghenywood.com

36D. Phone:

304-255-2276

36E. FAX:

304-253-6083

**PLEASE CHECK ALL APPLICABLE ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:**

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

## Tabbed Section 2

AWPI # 4

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

ISSUED TO:  
**ALLEGHENY WOOD PRODUCTS INTERNATIONAL, INC.  
1 AIRPORT RD  
PETERSBURG, WV 26847-0000**

BUSINESS REGISTRATION ACCOUNT NUMBER: **2243-9863**

This certificate is issued on: **07/27/2010**

*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.*

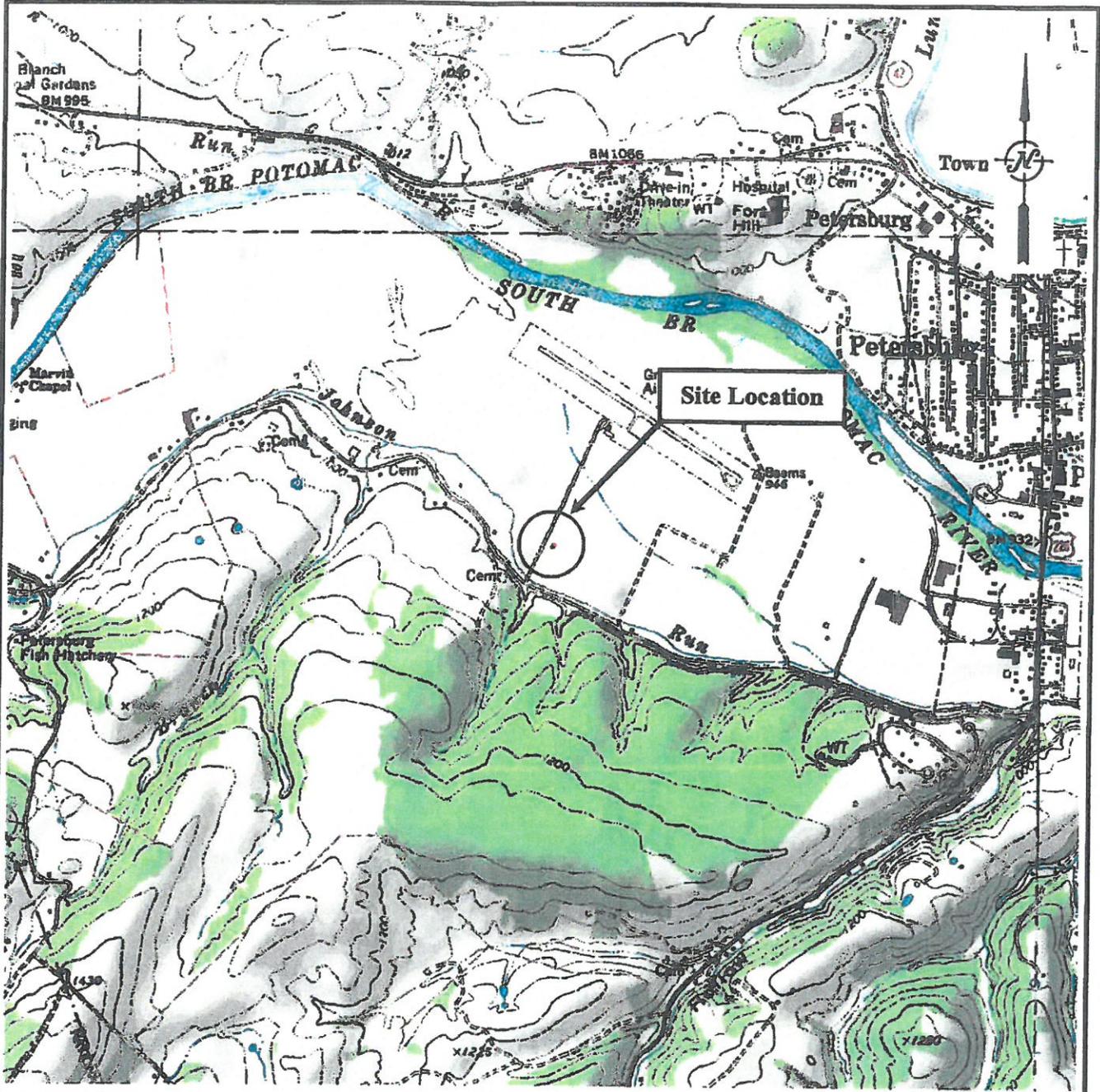
**This certificate is not transferrable and must be displayed at the location for which issued.**

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.

## Tabbed Section 3



Reference:  
 3-D TopoQuads © DeLorme,  
 Yarmouth, Me 04096  
 Source Data:  
 7.5 Minute USGS  
 Topographic Quadrangles  
 Petersburg West, WV  
 Petersburg East, WV  
 Rig, WV  
 Maysville, WV

## Area Map

Scale 1" = 2000'

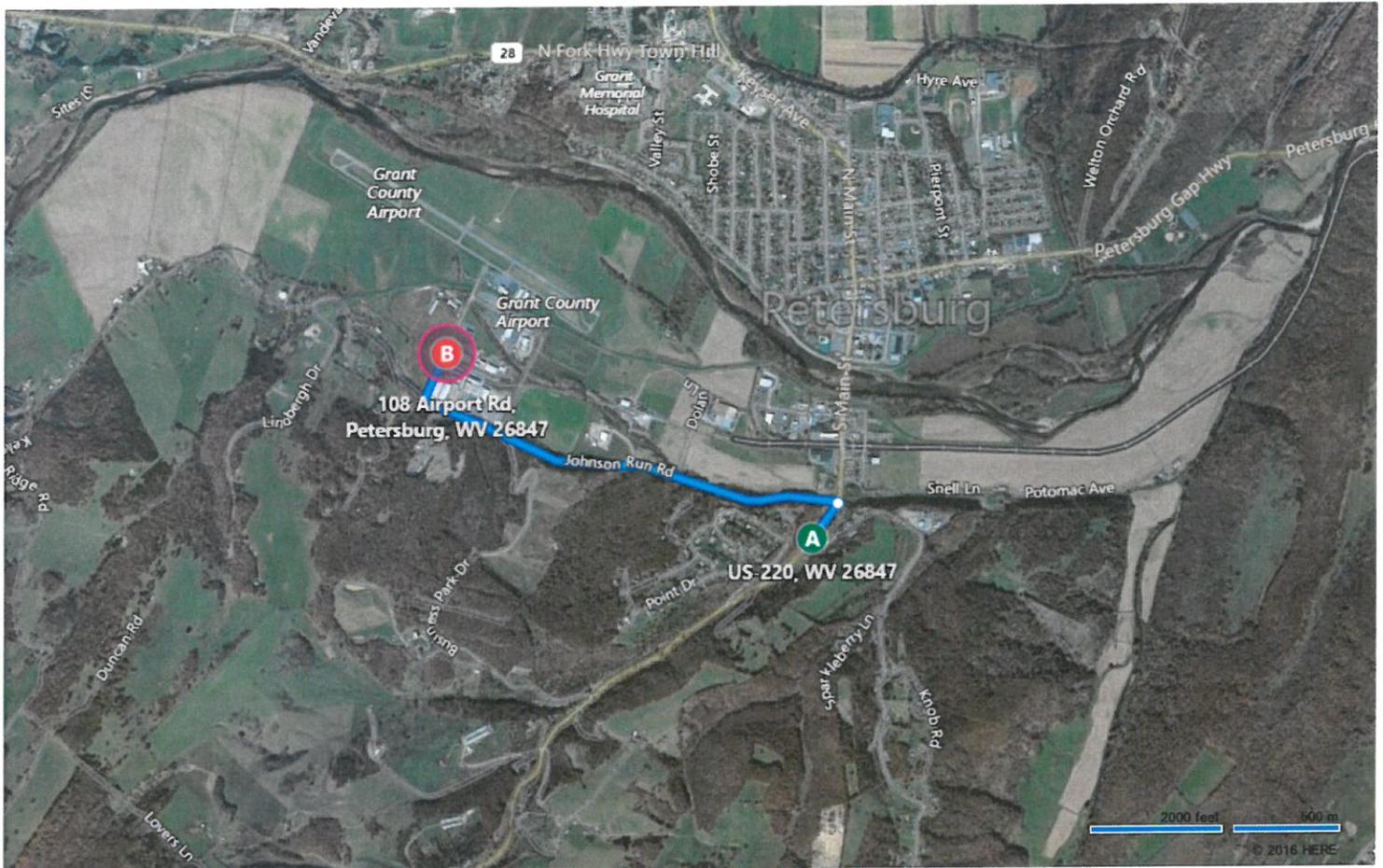
*MSES Consultants, Inc.*  
 Clarksburg, West Virginia

**Allegheny Wood Products  
 International, Inc.**

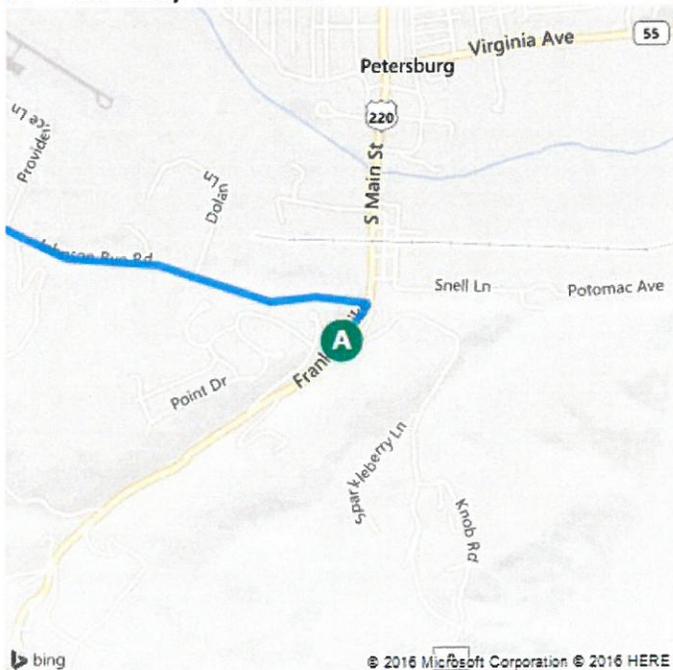
**Mill #4 Regulation 30  
 Permit Application**

Project No. 16-027

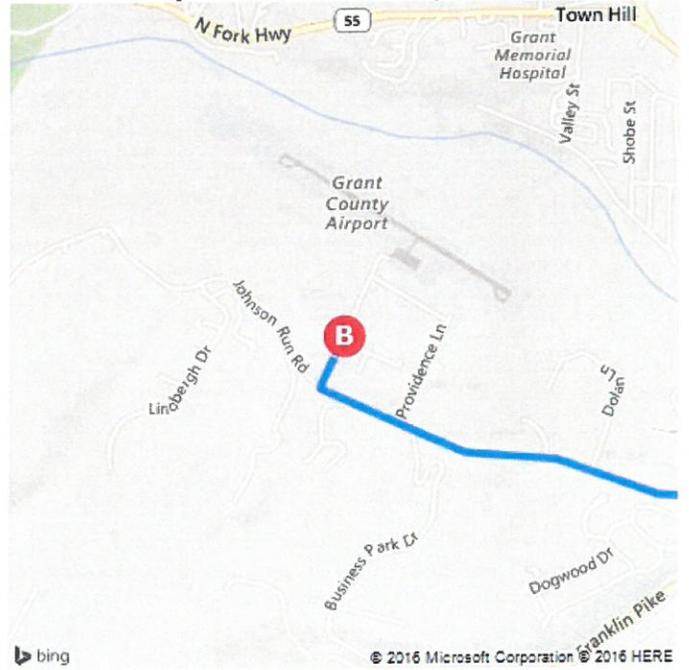
**Attachment A**



**A US-220, WV 26847**



**B 108 Airport Rd, Petersburg, WV 26847**



These directions are subject to the Microsoft® Service Agreement and are for informational purposes only. No guarantee is made regarding their completeness or accuracy. Construction projects, traffic, or other events may cause actual conditions to differ from these results. Map and traffic data © 2016 HERE™.

- A** US-220, WV 26847
- B** 108 Airport Rd, Petersburg, WV 26847

**6 min, 1.6 mi**  
Light traffic (5 min without traffic)  
Via Johnson Run Rd, Airport Rd



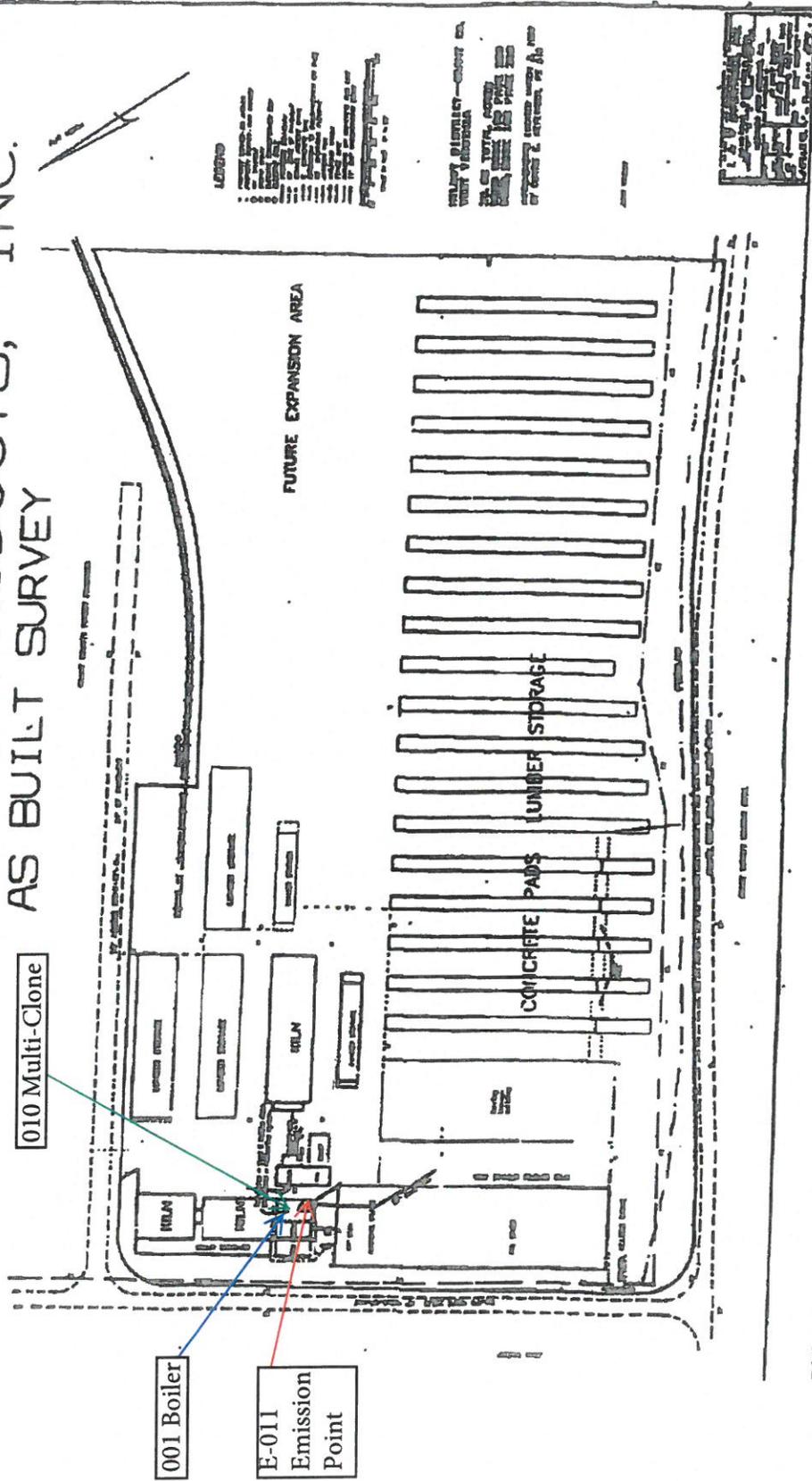
- A** US-220, WV 26847

↑	1. Depart <b>US-220 / Franklin Pike</b> toward Johnson Run Rd / CR-220/2	0.1 mi
↶	2. Turn <b>left</b> onto <b>Johnson Run Rd / CR-220/2</b>	1.3 mi
↷	3. Turn <b>right</b> onto <b>Airport Rd</b>	0.2 mi
	4. Arrive at <b>Airport Rd</b> The last intersection is Johnson Run Rd If you reach Providence Ln, you've gone too far	

- B** 108 Airport Rd, Petersburg, WV 26847

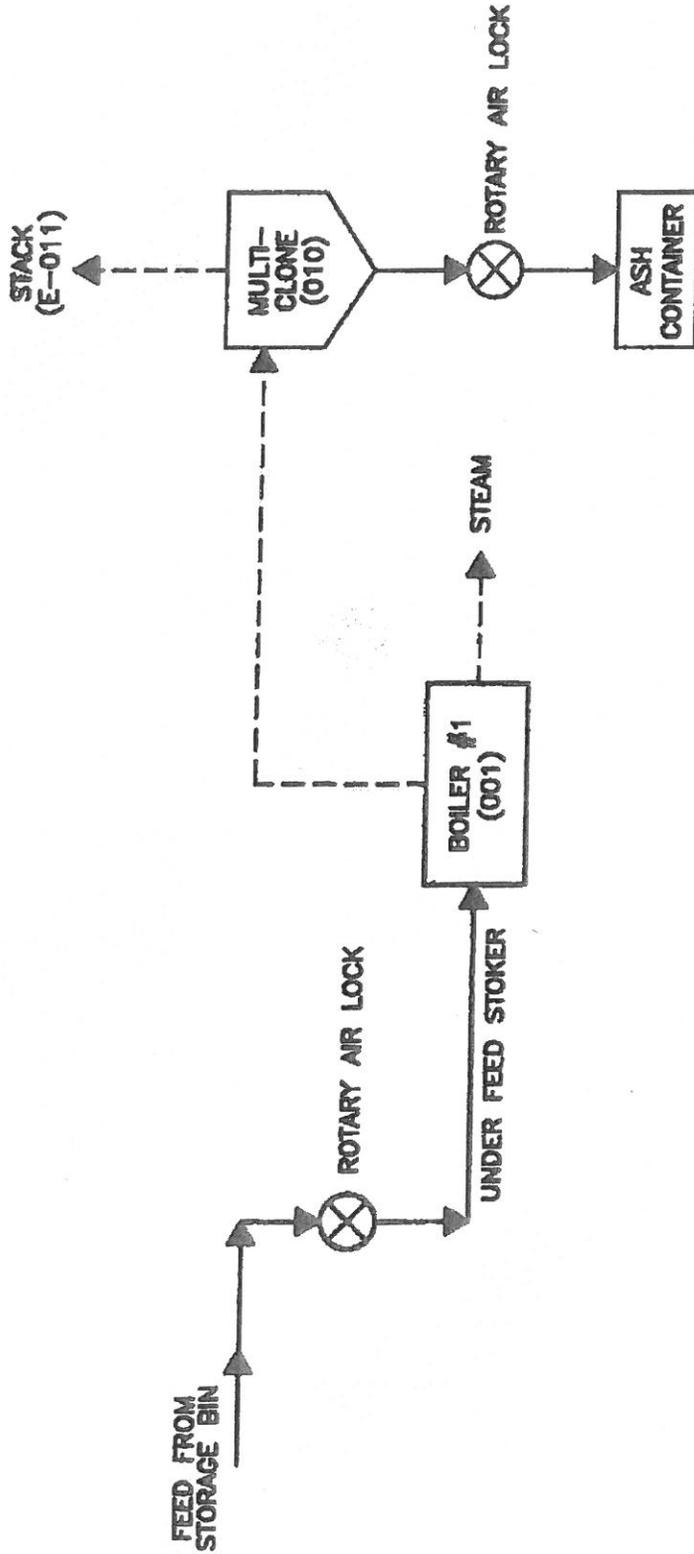
## Tabbed Section 4

# ALLEGHENY WOOD PRODUCTS, INC. AS BUILT SURVEY



## Tabbed Section 5

MSRP PROJECT NO. 03-027  
CMB FILE NO. 03-027-2 / DISK 1711



**LEGEND**

- ▶ PRODUCT FLOW
- - -▶ EMISSION

**FIGURE 2**

**ALLEGHENY WOOD PRODUCTS, INC.**

**PLANT #4  
PETERSBURG, WV**

**REGULATION 30 APPLICATION**

**BOILER #1  
PROCESS FLOW DIAGRAM**

## Tabbed Section 6

## **Attachment G: Process Description**

Sawdust is fed into the 200 HP Hurst boiler from the existing in-feed system. Using the sawdust as fuel, the boiler generates steam for use in the lumber drying process. The generated steam is transferred to the dry kilns via steam lines to be used in the drying process.

## Tabbed Section 7



## Tabbed Section 8

**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 <sup>1</sup>	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 <sup>3</sup> (Speciate VOCs & HAPS)	Maximum Potential Uncontrolled Emissions <sup>4</sup>		Maximum Potential Controlled Emissions <sup>5</sup>		Emission Form or Phase (At exit conditions, Solid, Liquid or Gas/Vapor)	Est. Method Used <sup>6</sup>	Emission Concentration <sup>7</sup> (ppmv or mg/m <sup>3</sup> )
		ID No.	Source	ID No.	Device Type	Short Term <sup>2</sup>	Max (hr/yr)		lb/hr	ton/yr	lb/hr	ton/yr			
E-011	Vertical Stack	001		010	Multiclone			Filterable PM	10.56	46.25	2.112	9.25	Solid	EE	-----
								Filterable PM10	9.6	42.05	1.92	8.41	Solid	EE	-----
								TOC	0.3744	1.64	0.3744	1.64	Gas	EE	-----
								NOx	2.112	9.25	2.112	9.25	Gas	EE	-----
								SO2	0.25	1.05	0.25	1.05	Gas	EE	-----
								CO	5.76	25.23	5.76	25.23	Gas	EE	-----

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.

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

<sup>2</sup> 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).

<sup>3</sup> List all regulated air pollutants. Speciate VOCs, including all HAPs. Follow chemical name with Chemical Abstracts Service (CAS) number. LIST Acids, CO, CS<sub>2</sub>, VOCs, H<sub>2</sub>S, Inorganics, Lead, Organics, O<sub>3</sub>, NO, NO<sub>2</sub>, SO<sub>2</sub>, SO<sub>3</sub>, all applicable Greenhouse Gases (including CO<sub>2</sub> and methane), etc. DO NOT LIST H<sub>2</sub>, H<sub>2</sub>O, N<sub>2</sub>, O<sub>2</sub>, and Noble Gases.

<sup>4</sup> 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).

<sup>5</sup> 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).

<sup>6</sup> 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).

<sup>7</sup> 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<sup>3</sup>) at standard conditions (68 °F and 29.92 inches Hg) (see 45CSR7). If the pollutant is SO<sub>2</sub>, use units of ppmv (See 45CSR10).



## Tabbed Section 9

**Attachment L**  
**Emission Unit Data Sheet**  
 (INDIRECT HEAT EXCHANGER)

Control Device ID No. (must match List Form):

**Equipment Information**

1. Manufacturer: Hurst Boiler Company	2. Model No. FB200-15 Serial No. FB200-15-4
3. Number of units: 1	4. Use: Replacement for Lambion 5.99 mmBtu Boiler - Used to produce steam for drying lumber
5. Rated Boiler Horsepower: 200 hp	6. Boiler Serial No.: FB200-15-4
7. Date constructed: 1995	8. Date of last modification and explain: N/A
9. Maximum design heat input per unit: 9.6 ×10 <sup>6</sup> BTU/hr	10. Peak heat input per unit: ×10 <sup>6</sup> BTU/hr
11. Steam produced at maximum design output: 6900 LB/hr 13 psig	12. Projected Operating Schedule: 8 Hours/Day 7 Days/Week 52 Weeks/Year
13. Type of firing equipment to be used: <input type="checkbox"/> Pulverized coal <input checked="" type="checkbox"/> Spreader stoker <input type="checkbox"/> Oil burners <input type="checkbox"/> Natural Gas Burner <input type="checkbox"/> Others, specify	14. Proposed type of burners and orientation: <input type="checkbox"/> Vertical <input type="checkbox"/> Front Wall <input type="checkbox"/> Opposed <input type="checkbox"/> Tangential <input checked="" type="checkbox"/> Others, specify Underfeed
15. Type of draft: <input type="checkbox"/> Forced <input checked="" type="checkbox"/> Induced	16. Percent of ash retained in furnace: 80 %
17. Will flyash be reinjected? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	18. Percent of carbon in flyash: 50 %

**Stack or Vent Data**

19. Inside diameter or dimensions: 1.42 ft.	20. Gas exit temperature: 400 °F
21. Height: 35 ft.	22. Stack serves: <input checked="" type="checkbox"/> This equipment only <input type="checkbox"/> Other equipment also (submit type and rating of all other equipment exhausted through this stack or vent)
23. Gas flow rate: 5740 ft <sup>3</sup> /min	
24. Estimated percent of moisture: %	



### Emissions Stream

37. What quantities of pollutants will be emitted from the boiler before controls?

Pollutant	Pounds per Hour lb/hr	grain/ACF	@ °F	PSIA
CO	5.76		400	14.7
Hydrocarbons	0.3744		400	14.7
NO <sub>x</sub>	2.112		400	14.7
Pb				
PM <sub>10</sub>	9.6		400	14.7
SO <sub>2</sub>	0.25		400	14.7
VOCs				
Other (specify) <sup>PM</sup>	10.56		400	14.7

38. What quantities of pollutants will be emitted from the boiler after controls?

Pollutant	Pounds per Hour lb/hr	grain/ACF	@ °F	PSIA
CO	5.76		400	14.7
Hydrocarbons	0.3744		400	14.7
NO <sub>x</sub>	2.112		400	14.7
Pb				
PM <sub>10</sub>	1.92		400	14.7
SO <sub>2</sub>	0.25		400	14.7
VOCs				
Other (specify) <sup>PM</sup>	2.112		400	14.7

39. How will waste material from the process and control equipment be disposed of?

40. Have you completed an *Air Pollution Control Device Sheet(s)* for the control(s) used on this Emission Unit.

41. Have you included the **air pollution rates** on the Emissions Points Data Summary Sheet?

**42. 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 PLAN:** Please list (1) describe the process parameters and how they were chosen (2) the ranges and how they were established for monitoring to demonstrate compliance with the operation of this process equipment operation or air pollution control device.

---

**TESTING PLAN:** Please describe any proposed emissions testing for this process equipment or 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.

---

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

## Tabbed Section 10

**Attachment M**  
**Air Pollution Control Device Sheet**  
(MECHANICAL COLLECTOR-CYCLONE)

Control Device ID No. (must match Emission Units Table):

**Equipment Information**

<p>1. Manufacturer: Hurst</p> <p>Model No. 12K-15</p>	<p>2. Method:    <input type="checkbox"/> Wet                      <input type="checkbox"/> Dry</p> <p>                  <input type="checkbox"/> Single-stage</p> <p>                  <input checked="" type="checkbox"/> Multiple: number</p> <p>                  <input type="checkbox"/> In series: number</p>		
<p>3. 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.</p>			
<p>4. Provide a diagram of the proposed simple cyclone or multicyclone system with examples of the parameters identified below:</p>			
<p>5. Simple cyclone system (show units):</p> <p>Major cylinder diameter:                      in.</p> <p>Major cylinder length:                              in.</p> <p>Cone length:                                      in.</p> <p>Gas outlet diameter:                              in.</p> <p>Gas outlet length:                                      in.</p> <p>Gas inlet height:                                      in.</p> <p>Gas inlet weight:                                      in.</p> <p>Dust outlet diameter:                              in.</p> <p>Pressure drop across the cyclone:                      in. H<sub>2</sub>O</p> <p>Describe the collected dust discharge valves and system:</p>	<p>6. Multicyclone system (show units):</p> <p>Major cylinder diameter:    42" X 42" Square    in.</p> <p>Major cylinder length:                      76"                      in.</p> <p>Cone length:                                      44"                      in.</p> <p>Gas outlet diameter:                              18"                      in.</p> <p>Gas outlet length:                                      350"                      in.</p> <p>Gas inlet height:                                      14' 10"                      in.</p> <p>Gas inlet weight:                                      N/A                      in.</p> <p>Dust outlet diameter:                              6" X 6"                      in.</p> <p>Pressure drop across the system:                      3.5 in. H<sub>2</sub>O</p> <p>Number of tubes:                                      15</p> <p>Tube diameter:                                      6 in.</p> <p>Tube length:                                      26 in.</p> <p>Describe the collected dust discharge valves and system: 6" X 6" Rotary Airlock Valve Into 55 Gallon Ash Drum</p>		
<p>7. More than one cyclone:</p> <p>Number of cyclones:</p> <p>Arrangement:    <input type="checkbox"/> Parallel    <input type="checkbox"/> Series</p> <p>Pressure drop across the system:                      in. H<sub>2</sub>O</p>			
<p>8. On a separate sheet answer the following questions for each cyclone and attach:</p> <table style="width:100%; border: none;"> <tr> <td style="width:50%; border: none;"> <p>Major cylinder diameter:                      in.</p> <p>Major cylinder length:                              in.</p> <p>Cone length:                                      in.</p> <p>Gas outlet diameter:                              in.</p> <p>Gas outlet length:                                      in.</p> </td> <td style="width:50%; border: none;"> <p>Gas inlet weight:                                      in.</p> <p>Dust outlet diameter:                              in.</p> <p>Pressure drop across the system:                      in. H<sub>2</sub>O</p> <p>Number of tubes:                                      in.</p> <p>Tube diameter:                                      in.</p> </td> </tr> </table> <p>Describe the collected dust discharge valves and systems:</p>		<p>Major cylinder diameter:                      in.</p> <p>Major cylinder length:                              in.</p> <p>Cone length:                                      in.</p> <p>Gas outlet diameter:                              in.</p> <p>Gas outlet length:                                      in.</p>	<p>Gas inlet weight:                                      in.</p> <p>Dust outlet diameter:                              in.</p> <p>Pressure drop across the system:                      in. H<sub>2</sub>O</p> <p>Number of tubes:                                      in.</p> <p>Tube diameter:                                      in.</p>
<p>Major cylinder diameter:                      in.</p> <p>Major cylinder length:                              in.</p> <p>Cone length:                                      in.</p> <p>Gas outlet diameter:                              in.</p> <p>Gas outlet length:                                      in.</p>	<p>Gas inlet weight:                                      in.</p> <p>Dust outlet diameter:                              in.</p> <p>Pressure drop across the system:                      in. H<sub>2</sub>O</p> <p>Number of tubes:                                      in.</p> <p>Tube diameter:                                      in.</p>		
<p>9. Guaranteed collection efficiency:</p> <p>Minimum:                      80 %</p>	<p>10. Efficiency of cyclone:</p> <p>At design maximum:                      %</p> <p>At average Operation:                      %</p>		
<p>11. Method of handling material removed:    Collected material will be disposed of with other refuse.</p>			

### Gas Stream Characteristics

12. Particle characteristics (for particulate matter):		Particulate matter inlet rate to device: 5.5 lb/hr	
Type of material: Mineral Fly Ash, Silica Potassium		.114 grains/ACF	
Particle density: 35			
Emission rate at collector outlet: 2.4 lb/hr			
0.05 grains/ACF			
13. Total flow rate:		14. Gas Stream Temperature:	
Design maximum: acfm		Inlet: °F	
Average expected: acfm		Outlet: °F	
15. Gas flow rate into collector: 5740 acfm at		400°F and 14 PSIA	
16. Viscosity of gas stream at the above temperature and pressure:		51 lb/sec-ft	
17. Inlet gas velocity: 40 ft/sec		18. Particulate Grain Loading in grains/scf:	
		Inlet:	
		Outlet:	
19. Supply a curve showing particulate collection efficiency versus gas volume from 25 to 100 percent of design rating of collector.			

### Particulate Distribution

20. Complete the table:	Particle Size Distribution at Inlet to Collector	Fraction Efficiency of Collector
Particulate Size Range (microns)	Weight % for Size Range	Weight % for Size Range
0 – 2	2	0
2 – 4	2	55
4 – 6	3	85
6 – 8	3	92
8 – 10	5	95.5
10 – 12	6	97.4
12 – 16	7	98.7
16 – 20	8	99.3
20 – 30	5	99.4
30 – 40	10	99.8
40 – 50	10	99.8
50 – 60	5	99.8
60 – 70	5	
70 – 80	5	
80 – 90	5	
90 – 100	5	
>100	5	

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

N/A

22. Describe the collection material disposal system:

Collected in a 55 Gallon Drum

23. Have you included **Mechanical Collector (Cyclone) Control Device** in the Emissions Points Data Summary Sheet? Yes

**24. 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:

RECORDKEEPING:

REPORTING:

TESTING:

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.

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

80

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

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

## Tabbed Section 11

## John Dilorenzo

---

**From:** Coccari, Gene M <Gene.M.Coccari@wv.gov>  
**Sent:** Thursday, November 17, 2016 11:44 AM  
**To:** John Dilorenzo  
**Subject:** Allegheny Wood Products: Information on Boiler Move

Hello-

As we discussed, a modification permit application will be required for the relocation of the 9.6 MMBtu (200 HP) wood waste-fired boiler outlined below. The permit will have to be issued before the source can be actually physically moved. This will take approximately 90 days from submission of a complete application. The base application fee is \$1,000, and due to the fact that the requirements of the federal Boiler GACT (Subpart 6J) will have to be added to the new permit, an additional \$2,500 fee is required for a total of \$3,500. DAQ Permitting requests that one hard copy with original signatures in blue ink and 2 CD's be submitted with the check. The application sections can be viewed at: <http://www.dep.wv.gov/daq/permitting/Pages/nsr-forms.aspx>. You will need to download and complete the following sections:

Application for NSR Permits and/or Title V Operating Permit Revision  
Attachment E - Plot Plan - Guidelines  
Attachment I - Emission Units Table  
Attachment J - Emission Points Data Summary Sheet  
Attachment L - Indirect Heat Exchanger EUDS  
Attachment M - Mechanical Collector CDS  
Attachment P - Example Legal Advertisement  
Attachment R - Authority of Corporation

Obviously, so information from the existing permit(s) can be used to populate the new application forms. Also, it seems that the emissions for the wood waste-fired boiler to be re-located outlined in the application and permit for the device (R13-1958) are under-estimated. Therefore, the SBAP has calculated new pollutant emissions, accomplished using U.S. EPA's AP-42: *A Compilation of Air Emission Factors*, specifically Chapter 1.6, "Wood Residue Combustion In Boilers." The emission factors are in units of lbs of pollutant/million Btu (MMBtu) of heat input. The emission factors used are for wet wood as a fuel, and the PM factors take into account the use of a mechanical collector (multiclone).

	<u>Emission Factor</u>	<u>Emissions (PPH)</u>	<u>Emissions (PPY)</u>	<u>Emissions (TPY)</u>
Filterable				
PM	0.22	2.112	18,501	9.25
Filterable PM-10	0.2	1.92	16,819.2	8.41
TOC*	0.039	0.3744	3,280	1.64
NOx	0.22	2.112	18,501	9.25
SO2	0.025	0.24	2,102.4	1.05
CO	0.6	5.76	50,457.6	25.23

Yearly emissions are calculated by multiplying pounds per hour (PPH) by 8,760 hrs/yr to derive pounds per year (PPY). Tons per year (TPY) are derived by dividing PPY by 2,000 lbs/ton. If I can be of further assistance, please advise. Thank you.

\* Total organic compounds

Gene M. Coccari  
Environmental Resource Analyst  
Division of Air Quality

## Tabbed Section 12

## AIR QUALITY PERMIT NOTICE Notice of Application

Notice is given that Allegheny Wood Products International, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a **Modification Permit** for a **wood fired boiler** located at **108 Airport Road, in Petersburg**, in **Grant** County, West Virginia.

The latitude and longitude coordinates are: **Lat.: 38.9886416, Lon.: - 079.147105**

The applicant estimates the potential to discharge the following Regulated Air Pollutants will be: NOx: 9.25 TPY, CO: 25.23 TPY, PM: 9.25 TPY, and PM<sub>10</sub>: 8.41 TPY

Startup of operation is planned to begin on or about the **1<sup>st</sup>** day of **March, 2017**. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57<sup>th</sup> 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 **14<sup>th</sup>** day of **December, 2016**.

By: **Allegheny Wood Products International, Inc.**  
**E. Thomas Plaughter**  
**VP-Operations**  
**P. O. Box 867**  
**Petersburg, WV 26847**

## Tabbed Section 13

**Attachment R**  
**AUTHORITY OF CORPORATION**  
**OR OTHER BUSINESS ENTITY (DOMESTIC OR FOREIGN)**

TO: The West Virginia Department of Environmental Protection,  
Division of Air Quality

DATE: December 2, 2016

ATTN.: Director

Corporation's / other business entity's Federal Employer I.D. Number 27-2895233

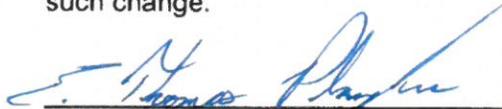
The undersigned hereby files with the West Virginia Department of Environmental Protection, Division of Air Quality, a permit application and hereby certifies that the said name is a trade name which is used in the conduct of an incorporated business or other business entity.

Further, the corporation or the business entity certifies as follows:

(1) E. Thomas Plaughter (is/are) the authorized representative(s) and in that capacity may represent the interest of the corporation or the business entity and may obligate and legally bind the corporation or the business entity.

(2) The corporation or the business entity is authorized to do business in the State of West Virginia.

(3) If the corporation or the business entity changes its authorized representative(s), the corporation or the business entity shall notify the Director of the West Virginia Department of Environmental Protection, Division of Air Quality, immediately upon such change.



\_\_\_\_\_  
President or Other Authorized Officer  
(Vice President, Secretary, Treasurer or other  
official in charge of a principal business function of  
the corporation or the business entity)

(If not the President, then the corporation or the business entity must submit certified minutes or bylaws stating legal authority of other authorized officer to bind the corporation or the business entity).

\_\_\_\_\_  
Secretary

\_\_\_\_\_  
Allegheny Wood Products International, Inc.  
Name of Corporation or business entity

## Tabbed Section 14

## Tabbed Section 15