Received
January 5, 2023
WV DEP/Div of Air Quality

Division of Air Quality Permit Application Submittal

Please find attached a permit application for : Allegheny Wood Products International, Inc.; 148 Park Farm Dr., Baker WV 26801
[Company Name; Facility Location]

- DAQ Facility ID (for existing facilities only):
- Current 45CSR13 and 45CSR30 (Title V) permits associated with this process (for existing facilities only):

- Type of NSR Application (check all that apply):
  - ☑ Construction
  - ☐ Modification
  - ☐ Class I Administrative Update
  - ☐ Class II Administrative Update
  - ☑ Relocation
  - ☐ Temporary
  - ☐ Permit Determination

- Type of 45CSR30 (TITLE V) Revision (if any)**:
  - ☐ Title V Initial
  - ☐ Title V Renewal
  - ☐ Administrative Update
  - ☐ Minor Modification
  - ☐ Significant Modification
  - ☐ Off Permit Change

****If any box above is checked, include the Title V revision information as ATTACHMENT S to this application.**

- Payment Type:
  - ☐ Credit Card (Instructions to pay by credit card will be sent in the Application Status email.)
  - ☑ Check (Make checks payable to: WVDEP – Division of Air Quality)
    Mail checks to:
    WVDEP – DAQ – Permitting
    Attn: NSR Permitting Secretary
    601 57th Street, SE
    Charleston, WV 25304

Please wait until DAQ emails you the Facility ID Number and Permit Application Number. Please add these identifiers to your check or cover letter with your check.

- If the permit writer has any questions, please contact (all that apply):
  - ☐ Responsible Official/Authorized Representative
    - Name:
    - Email:
    - Phone Number:
  - ☑ Company Contact
    - Name: John DiLorenzo
    - Email: jdilorenzo@alleghenywood.com
    - Phone Number: 304-575-7074
  - ☑ Consultant
    - Name: John Keeling
    - Email: John.Keeling@sj-environmental.com
    - Phone Number: 304-669-9643

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):*
Allegheny Wood Products International, Inc.

2. Federal Employer ID No. ***(FEIN):***
5 5 0 5 3 7 1 9 0

3. Name of facility *(if different from above):*
Baker Log Yard

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

5A. Applicant's mailing address:
P.O. Box 867
Petersburg, WV 26847

5B. Facility's present physical address:
148 Park Farm Dr, Baker, WV 26801
Previous location was 390 Industrial Park Rd, Moorefield, WV 26836

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:

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: **Applicant leases the property**
- 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.): **Log fumigation operation**

10. North American Industry Classification System **(NAICS)** code for the facility:
321113

11A. DAQ Plant ID No. (for existing facilities only):
New Site
Prior Site ID Number 031-00050

11B. List all current 45CSR13 and 45CSR30 (Title V) permit numbers associated with this process (for existing facilities only):
Morefield Site was R13-3393

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**.

From Corridor H (US Route 48) exit at State Route 55 in Moorefield. Proceed 8.7 miles east on US Route 48 to Park Farm Dr. Turn left onto Park Farm Drive. The facility is on the right.

12.B. New site address (if applicable):	12C. Nearest city or town:	12D. County:
148 Park Farm Dr.	**Baker**	**Hardy**
12.E. UTM Northing (KM): **4329.966**	12F. UTM Easting (KM): **689.438**	12G. UTM Zone: **17**

13. Briefly describe the proposed change(s) at the facility:
Conduct fumigation of logs prior to shipment overseas.

14A. Provide the date of anticipated installation or change: **07/10/2023** – 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: **12/12/2023**

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

15. Provide maximum projected **Operating Schedule** of activity/activities outlined in this application:
Hours Per Day **24** Days Per Week **7** Weeks Per Year **52**

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

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

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

Section II. Additional attachments and supporting documents.

19. Include a check payable to WVDEP – Division of Air Quality with the appropriate **application fee** (per 45CSR22 and 45CSR13).

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.**

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 Fumigation equipment

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 Kelly S Riddle *(Please use blue ink)* DATE: 1/2/2023 *(Please use blue ink)*

35B. Printed name of signee: **Kelly Riddle**		35C. Title: **Vice President**
35D. E-mail: **kelly@alleghenywood.com**	36E. Phone: **304-329-2097**	36F. FAX:
36A. Printed name of contact person (if different from above): **John F. DiLorenzo**		36B. Title: **Manager Employee Relations and EHS**
36C. E-mail: **jdilorenzo@alleghenywood.com**	36D. Phone: **304-575-7074**	36E. FAX:

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

WV Business Registration

WEST VIRGINIA
STATE TAX DEPARTMENT
BUSINESS REGISTRATION CERTIFICATE

ISSUED TO:
ALLEGHENY WOOD PRODUCTS INC
390 INDUSTRIAL PARK RD
MOOREFIELD, WV 26836-8200

BUSINESS REGISTRATION ACCOUNT NUMBER: **2350-1251**

This certificate is issued on: 12/4/2017

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.

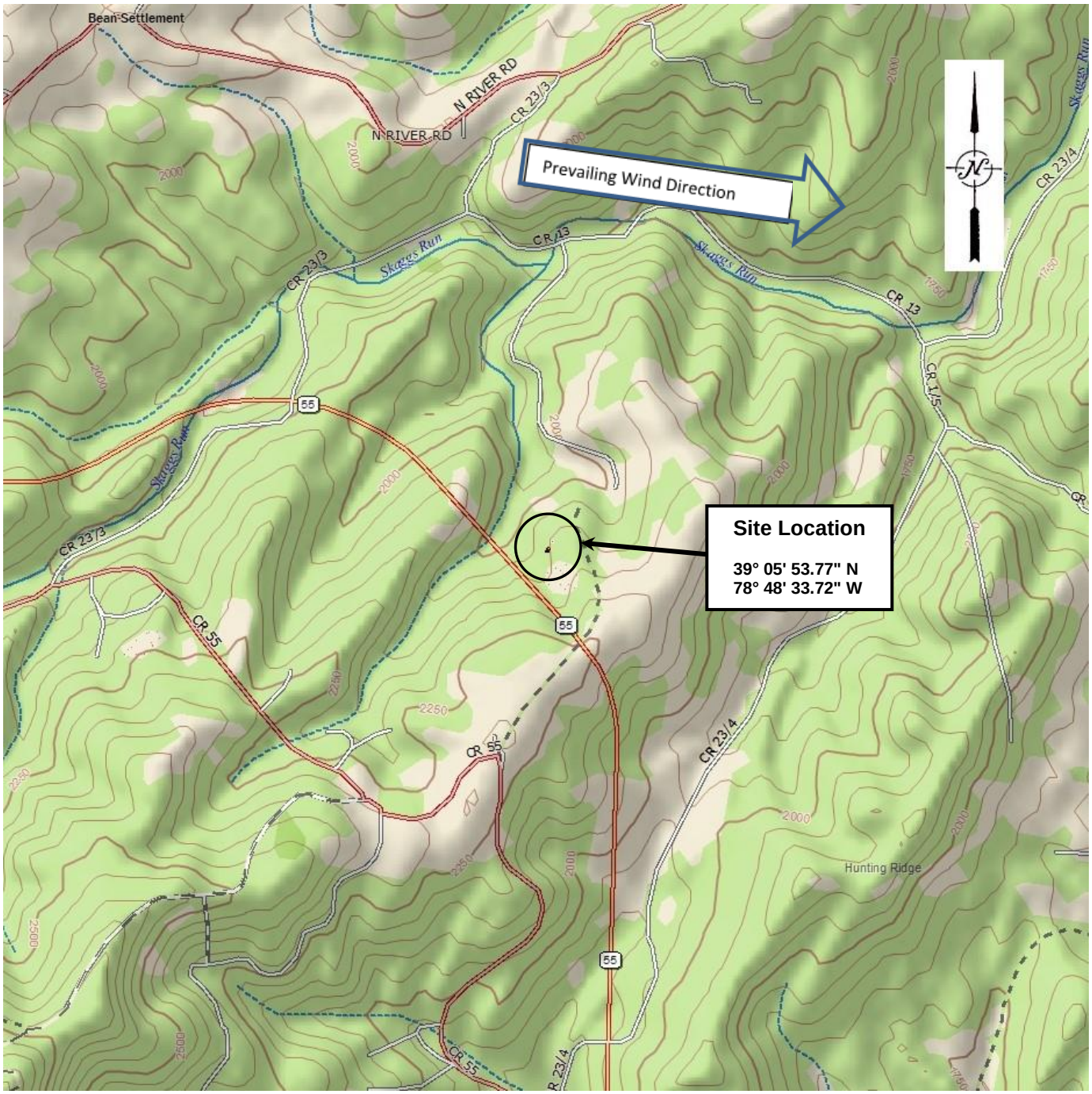
atL006 v.4
L0108993216

Save a stamp and your time. You can now view, file and pay taxes at https://mytaxes.wvtax.gov
More taxes will be available for online access in the future.

TAX	FILING FREQUENCY	ACCOUNT NUMBER
Business Registration Tax		2350-1251

ATTACHMENT B

MAPS



Reference:
XMap® 6 © DeLorme, Yarmouth, Me 04096
Source Data: Delorme North America Topographic Data 2011

Topographic Quadrangle
Needmore, WV

39.098269 Easting 689.438
-78.809367 Northing 4329.966
Zone 17

Vicinity Map

Scale 1" = 2000'

Environmental Services, LLC
400 White Oaks Blvd.
Bridgeport, WV 26330
304-933-8000

ALLEGHENY WOOD PRODUCTS, INC.

Log Fumigation Operation
148 Park Farm Dr
Baker, WV 26801

Project No. 008350.00015

Attachment B

ATTACHMENT C

INSTALLATION AND START UP SCHEDULE

Attachment C

New Facility Start-up Schedule

The log fumigation facility is expected to be constructed beginning 7/10/2023.

Anticipated start-up date is 12/12/2023.

ATTACHMENT D
REGULATORY DISCUSSION

Attachment D

Regulatory Discussion

Methyl bromide is a highly regulated pesticide. Attachment D presents a summary of regulations and advisories, as presented in the Toxicological Profile for Methyl Bromide (ATSDR, 1992). Methyl bromide regulatory programs and requirements are discussed below. The operation of the Moorefield fumigation site under R13-3393 since 2020 has not resulted with any community complaints or releases beyond the permit allowed emission rates.

Federal Clean Air Act (CAA)

As discussed in the Introduction, since 1992 USEPA has implemented restrictions on many uses of methyl bromide in response to phase-out requirements established under the Montreal Protocol and the Clean Air Act. These restrictions were implemented because methyl bromide is considered a stratospheric ozone depleting substance. However, the use of methyl bromide for QPS applications such as those performed at the temporary AWP facility is specifically authorized by the QPS exemption under Title VI (Stratospheric Ozone Protection) of the Clean Air Act. The interim final regulation for the QPS exemption was issued by EPA on July 19, 2001, and the final regulation was published in the Federal Register on January 2, 2003.

There are three exemptions from the phase-out of methyl bromide found in the Montreal Protocol and also in the US implementation of the Protocol through Title VI of the Clean Air Act: (1) emergency use; (2) certain short-term "critical" uses where anticipated alternatives to methyl bromide have not yet become economically and technologically feasible; and (3) QPS. In contrast to the "critical" uses, for which application must be made each year, the QPS exemption is indefinite and will continue until there are alternatives for methyl bromide. Despite the passage of several decades and a myriad of research efforts, however, finding alternatives for QPS methyl bromide treatments has proven extremely difficult.

Methyl bromide is classified as both a HAP and a VOC (reference: 40 CFR 51.100(s)) by USEPA. However, testing has demonstrated that methyl bromide has negligible photochemical reactivity (i.e., negligible ozone generation potential) and it is eligible for exclusion from definition and regulation as a VOC, per EPA policy. A petition to exempt methyl bromide from regulation as an ozone precursor and photochemically reactive VOC was submitted to EPA by the Methyl Bromide Industry Panel of the Chemical Manufacturer's Association in July 1996. The petition was subsequently updated by the American Chemistry Council in about 2008. While EPA has acknowledged that methyl bromide is negligibly reactive based on its low photochemical reactivity, final processing of the petition has not been completed.

Federal Insecticide, Fungicide and Rodenticide Act (FIFRA)

Methyl bromide was introduced as a pesticide in 1932 and was first registered in the U.S. in 1961. Because of advances in science, public policy, and pesticide use practices, USEPA requires that pesticides first registered before November 1, 1984 be re-registered to ensure that they meet today's more stringent standards (USEPA, 2008). The re-registration process for methyl bromide is ongoing.

The USEPA Office of Pesticide Programs (OPP) plays a role in managing QPS uses through its pesticide labeling program established under the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA). OPP is developing specific methyl bromide labels for both QPS and soil fumigation to more clearly define permissible uses. The OPP is also developing new pesticide use requirements that could include lower maximum application rates, fumigation management plans, good agricultural practices to reduce emissions, lower permeability films (lower mass transfer coefficients) for soil fumigation, and buffers between the treated area and habited structures, schools, hospitals, and day care centers (UNEP 2009b). Any new label requirements that may apply to QPS treatments will of necessity need to be harmonized with USDA APHIS requirements.

USDA Animal and Plant Health Inspection Service (APHIS)

The USDA has developed a series of detailed fumigation protocols for various QPS commodities. The treatment schedules are published in the USDA APHIS PPQ Treatment Manual. All quarantine fumigation conducted at the temporary AWP facility will be performed under the direct supervision of APHIS officers and in accordance with the Treatment Manual, USEPA approved product labels and, in certain instances, international phytosanitary standards or commodity trade association standards. AWP will also observe industry practice in using the APHIS Treatment Manual as a "default protocol" if it encounters situations that are not covered by any of the other protocols.

As noted in elsewhere in this submittal, the APHIS Treatment Manual is highly prescriptive, dictating procedures in at least thirteen different categories and requiring the use of specific equipment and monitoring devices.

Within the broad range of APHIS protocols for methyl bromide fumigation, there are significant differences in methyl bromide dosages and durations for various commodities.

The Treatment Manual is the product of decades of research, often performed by the USDA's Agricultural Research Service and/or in conjunction with universities, dedicated to finding the most effective means of controlling quarantine pests on specific commodities. For this reason, EPA approval of an alternative treatment to methyl bromide is but a first step in its implementation as a QPS treatment. APHIS, in turn, must assess whether a proposed alternative is at least as effective, if not more so, than methyl bromide in removing a specific quarantine pest on a specific commodity (UNEP 2009b). It must also consider whether the treatment will adversely affect the commodity or leave unacceptable residues, often a significant issue with food products.

ATTACHMENT E

PLOT PLAN

Site Aerial

39°05' 53.77" N 78° 48' 33.72" W
39.098269 -78.809367
Easting 689.438 Northing 4329.966
Zone 17

Allegheny Wood Products International, Inc.

Log Fumigation Operation
148 Park Farm Dr
Baker, WV

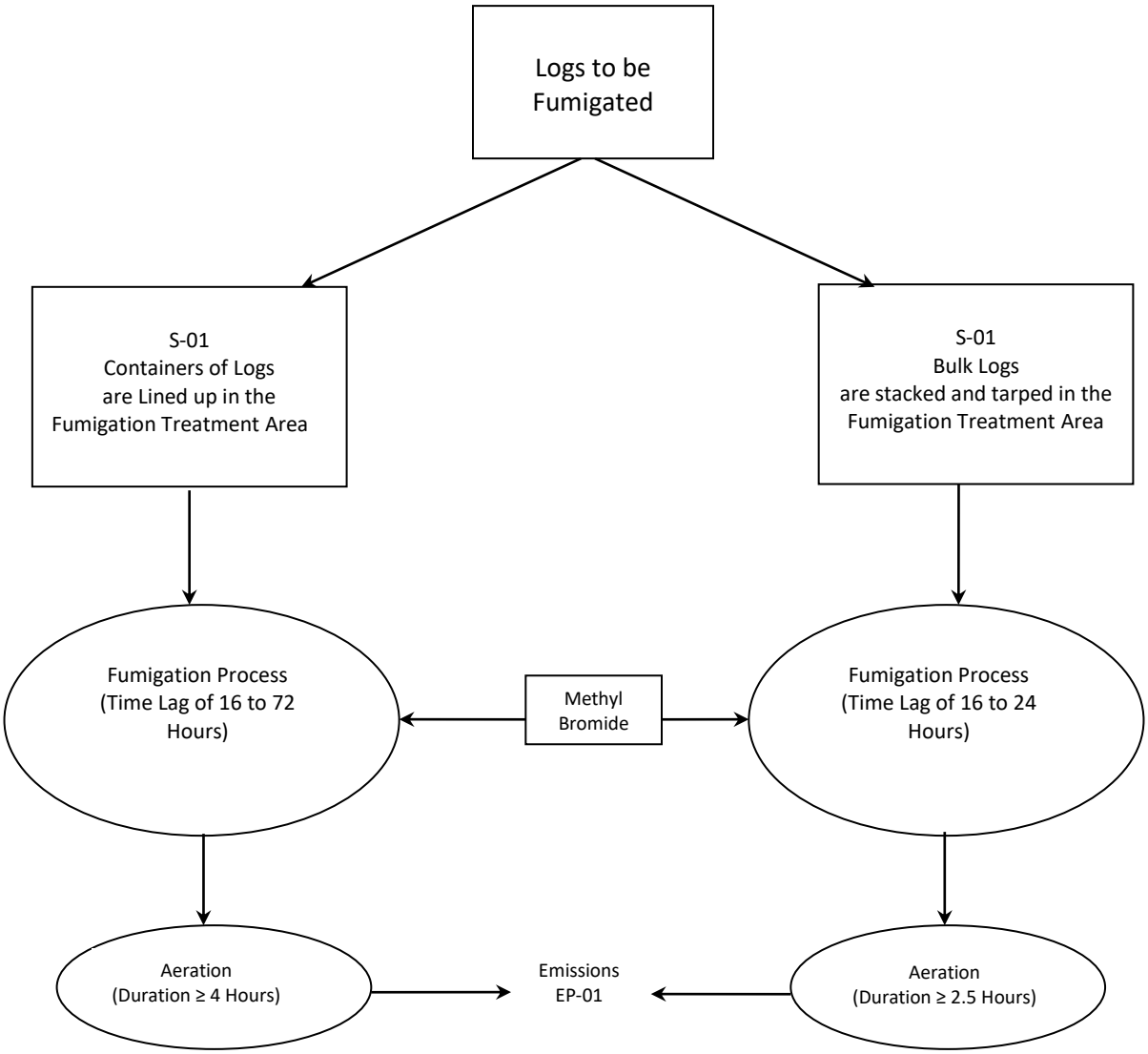
Project No. 008350.00015

ATTACHMENT F

DETAILED PROCESS FLOW DIAGRAMS

Attachment F

PROCESS FLOW DIAGRAM



ATTACHMENT G

PROCESS DESCRIPTIONS

Attachment G

Project Description

Allegheny Wood Products, Inc. (AWP) seeks was issued permit number R13-3393 to construct and operate a log fumigation facility in Moorefield, WV which is in Hardy County. That facility was constructed and has operated on a continuous basis with no issues. The property where the facility is located has been sold and AWP needs to relocate the process. Property for the installation of a new fumigation building and associated infrastructure relocation has been leased at 148 Park Farm Drive near Baker, WV 26801. Baker is also located in Hardy County.

Fumigation operations will include methyl bromide fumigation of bulk log stacks and shipping containers inside a to be constructed building. Fumigation of the logs is necessary since these logs are to be shipped outside the United States to countries requiring fumigation with Methyl Bromide.

A site location map of the facility is provided in Attachment B. This fumigation is conducted under the direct, on-site supervision of officers of United States Department of Agriculture's (USDA) Animal and Plant Health Inspection Service (APHIS). Methyl bromide is the sole fumigant used and emitted at this facility.

The purpose of this application is to respectfully request that this Regulation 13 permit be reassigned to AWP at this new location. A complete R13 Construction Air Permit application for the fumigation operations is provided. Attached to this submittal are the applicable WVDAQ application forms, an extended description of the project, detailed emissions calculations, site process flow diagram, and location map.

Process Overview and Description

The facility will be designed and operated to comply with the requirements of the USDA APHIS, Plant Protection and Quarantine (PPQ) division, the regulatory body that oversees QPS treatments in the United States. The fumigant used at the facility is methyl bromide, which has been the principal QPS fumigation tool of APHIS for over forty years and has been regularly used at various ports and fumigation facilities throughout the United States.

Although methyl bromide has been a long-standing and principal QPS treatment tool as prescribed by APHIS, the compound was deemed a depleter of stratospheric ozone in 1992 under the terms of an international treaty, the Montreal Protocol on Substances That Deplete the Ozone Layer, and therefore subject to "phase-out" of most of its uses. The Federal Environmental Protection Agency (USEPA), in implementing the requirements of the Montreal Protocol, has greatly restricted use of methyl bromide for applications such as soil fumigation. However, its use for QPS applications such as those to be performed at this location has been preserved until

such time as there is a replacement for it, and consequently, the compound is specifically authorized by the QPS exemption under Title VI (Stratospheric Ozone Protection) of the Clean Air Act (CAA).

The APHIS officers oversee fumigation of cargo entering the U.S. on which invasive pests, not native to the U.S., are found or are deemed to be present due to past inspections. The cargo is quarantined until it receives treatment in accordance with USDA requirements. APHIS officers also oversee pre-shipment quarantine fumigation treatments that are required by other countries (e.g., China, India, Turkey) to which U.S. goods are to be shipped.

The QPS process is dictated by APHIS protocols for commodities through its Plant Protection and Quarantine (PPQ) division. The APHIS protocols and treatment schedules are published in the 920-page PPQ Treatment Manual. Further, all QPS fumigation conducted by AWP at the temporary Moorefield location will be performed under the direct, on-site supervision of an APHIS officer. In addition, all fumigation at the site will be performed in accordance with USEPA's Federal Insecticide, Fungicide and Rodenticide Act (FIFRA) pesticide label requirements as well as the PPQ Treatment Manual, and applicable international phytosanitary standards.

The treatment protocols published in the Treatment Manual are highly prescriptive and dictate detailed requirements for many aspects of the fumigation process, including but not limited to the following:

- Fumigation chemical (e.g., methyl bromide);
- Dosage - pounds of fumigant per 1,000 cubic feet of fumigated space;
- Maintenance of dosage by monitoring fumigant concentrations at multiple locations within the treatment enclosure throughout the treatment period and periodic addition of fumigant as necessary to maintain the required concentration;
- Treatment duration;
- Forced recirculation within the enclosure to maintain the correct mixture of the fumigant in air throughout the prescribed treatment period;
- Monitoring the temperature of the environment and the commodity at multiple locations within the treatment enclosure throughout the treatment period;
- Weatherization of the treatment enclosure;
- Availability of utilities;
- Arrangement of commodities within the treatment enclosure;
- Aeration of the commodity and treatment enclosure at the conclusion of the treatment period; and
- Safety requirements for release of the commodity and reentry of facility personnel into the area at the end of the treatment.

An overview of the methyl bromide fumigation process for timber is provided below. More detailed descriptions are provided in excerpts from the USDA Treatment Manual (provided as an Appendix to the Case-by-case MACT report).

In summary, the fumigation activities are designed and implemented to comply with the following APHIS Treatment Manual requirements:

- Section 2-4: Methyl Bromide Tarpaulin Fumigation
- Section 2-9: Methyl Bromide Closed-door Container Fumigation

In addition to the requirements specified by the APHIS Treatment Manual, the required methyl bromide dose for hardwoods destined for China is specified by the China Protocol. Following fumigation at the proposed Baker facility, logs will be transported to be loaded onto ships for export. The fumigation procedures are summarized below.

The containers of logs are tightly aligned in groups, typically of seven to nine (7 to 9) containers. Fumigant injection lines, monitoring lines and circulation fans (to mix the fumigant with the air) are then placed inside the containers.

Following an inspection and approval by an APHIS officer, the container doors are closed, and vents and other potential leakage sites are sealed. The volume inside each container is calculated, and the amount of fumigant appropriate for that volume (and the ambient temperature) is calculated per the Treatment Manual, the type of wood, the target pest, ambient temperature and other atmospheric conditions. The fumigant is then injected into the containers through the lines previously installed.

When the APHIS inspector is satisfied with the preparations, fumigant is injected into the containers, which now function as fumigation enclosures. Methyl bromide from pressurized cylinders (typically 110-pound or 150-pound cylinders) is piped through a "volatilizer," a heat-exchange unit that heats the gas to approximately 140 degrees F. The warmed gas is delivered through reinforced hoses that discharge into the containers. Because methyl bromide converts from a liquid to a gas at 38.5 degrees F, the volatilizer is used to eliminate the possibility of any liquid methyl bromide being present during the fumigation.

Hardwood logs to be fumigated at the Baker facility are exposed to the fumigant for sixteen to seventy-two (16 – 72) hours depending on the species, during which time gas concentration levels within the fumigation enclosure as well as outside the fumigation building are monitored on a schedule to ensure that an adequate gas concentration over time is maintained to eliminate the target pest, but that no concentration of Methyl Bromide exceed the Occupation Safety and Health Administration Permissible Exposure level of 5 part per million (ppm). The fumigant concentration readings are taken with an APHIS-approved device, typically either a Fumiscope® manufactured by Key Chemical, a MB-ContainIR® manufactured by Spectros Instruments or for the exterior area monitoring a PureAire Monitor manufactured by PureAire Monitoring Systems, Inc. In addition to the gas readings, the fumigators periodically check to see that there are no gas leaks from the fumigation enclosures. During this time a buffer zone is maintained around the perimeter of the treated commodity. If the PureAire Monitors measure a concentration exceeding 5 ppm of Methyl Bromide, fumigation gas introduction is suspended until the containment is inspected for leaks and repairs performed.

Bulk log fumigations are performed in a similar manner, except the logs are placed in piles on the concrete floor of the building prior to covering with the tarpaulin. The building doors are sealed and the fumigant is introduced to the covered piles of logs.

At the end of the log exposure period, the cargo is aerated using permanently located fans to push the air inside the building towards the permanently located exhaust hood which is serviced by a 10,000 CFM exhaust fan which discharges the building exhaust air to atmosphere through a seventy- five (75) foot high exhaust stack. Aeration will be performed in accordance with the USDA APHIS Treatment Manual (Section 2), which provides requirements regarding aeration flow rates. For example, aerating nonsorptive, noncontainerized cargo (indoors and outdoors) requires a minimum 3,500 cfm fan capacity, and requires that the fans provide a minimum of 4 to 15 air exchanges per hour. Aeration using the closed-door container approach requires a minimum 5,200 cfm exhaust fan capacity.

The aeration discharge stack will be placed at the side of the building, as shown on the plot plan. When aeration begins, the container doors are then opened and the fixed location fans are used to conduct the fumigant to the aeration stack, which also pulls a supply fresh air through louvers in the building designed to open when there is a negative pressure in the building to remove and dilute any remaining fumigant. The ventilation period lasts a minimum of four hours, and the area is not cleared for re-entry by personnel until the concentration of fumigant in the air is less than five (5) parts per million (ppm), the level dictated by the USEPA-approved product label.

The APHIS-approved devices for "clearing," or permitting access to the area by persons not wearing personal protective equipment, are the PureAire fixed location monitors and colorimetric detector tubes such as those manufactured by Draeger. At any time the 5 ppm level is reached or exceeded, fumigators wear self-contained breathing apparatus with full face masks and other personal protective equipment such as long-sleeved shirts and pants. Once aeration begins, however, fumigant concentrations drop very rapidly.

Once aeration is completed the bulk cargo is loaded into containers, containers that already contain logs are sealed, and all containers are transported to the port for loading onto ships. Each fumigation activity is documented in detail, and the APHIS inspector files a USDA Form 429 as the government's record of the fumigation. Thus, two independent, detailed records exist for every fumigation session.

Process Emissions

The emissions from the fumigation facility are methyl bromide, and a trace amount of methyl chloride, which is present as a manufacturing impurity at approximately 0.2 percent according to the Material Safety Data Sheet. For permitting purposes, emissions estimates are conservatively assumed to be equal to the methyl bromide applied for fumigation. In other words, all methyl bromide projected to be applied as a fumigant is assumed to be emitted during the aeration phase of the fumigation process.

Because aeration methods are dictated by USDA APHIS treatment protocols, changes in these protocols for log fumigations could impact project emissions. Future methyl bromide emissions could be reduced if the appropriate U.S. and foreign agencies approve either non-fumigation

treatments or the substitution of another fumigant for methyl bromide, currently the only fumigant accepted for QPS fumigations. At present, however, the operator cannot voluntarily limit the methyl bromide fumigation dose unless permitted to so by USDA and international treatment protocols.

The operation of the Moorefield fumigation site under R13-3393 since 2020 has not resulted with any community complaints or releases beyond the permit allowed emission rates.

ATTACHMENT H

SAFETY DATA SHEETS (SDS), MATERIAL SAFETY DATA SHEETS (MSDS)

SAFETY DATA SHEET

Methyl Bromide

Airgas
an Air Liquide company

Section 1. Identification

GHS product identifier : Methyl Bromide

Chemical name : Methyl Bromide

Other means of identification : methylbromide; Methane, bromo-; Monobromomethane; halon-1001; Bromomthane; 1-Bromomethane; Methane monobrome; Methylium bromatum; Embafume; Mathane, bromo-; unsymmetrical dimethylhydrazine

Product type : Gas.

Product use : Synthetic/Analytical chemistry.

Synonym : methylbromide; Methane, bromo-; Monobromomethane; halon-1001; Bromomthane; 1-Bromomethane; Methane monobrome; Methylium bromatum; Embafume; Mathane, bromo-; unsymmetrical dimethylhydrazine

SDS # : 001035

Supplier's details : Airgas USA, LLC and its affiliates
259 North Radnor-Chester Road
Suite 100
Radnor, PA 19087-5283
1-610-687-5253

24-hour telephone : 1-866-734-3438

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE GASES - Category 2
GASES UNDER PRESSURE - Compressed gas
ACUTE TOXICITY (inhalation) - Category 2
SKIN IRRITATION - Category 2
EYE IRRITATION - Category 2A
GERM CELL MUTAGENICITY - Category 2
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
AQUATIC HAZARD (ACUTE) - Category 1
AQUATIC HAZARD (LONG-TERM) - Category 1
HAZARDOUS TO THE OZONE LAYER - Category 1

GHS label elements

Hazard pictograms :

Signal word : Danger

Hazard statements : Extremely flammable gas.
May form explosive mixtures with air.
Contains gas under pressure; may explode if heated.
Fatal if inhaled.
Causes serious eye irritation.
Causes skin irritation.
May cause respiratory irritation.
Suspected of causing genetic defects.
May cause damage to organs through prolonged or repeated exposure. (central nervous system (CNS), kidneys)
Very toxic to aquatic life with long lasting effects.
Harms public health and the environment by destroying ozone in the upper atmosphere.

Section 2. Hazards identification

May form explosive mixtures with air.

Precautionary statements

General : Read and follow all Safety Data Sheets (SDS'S) before use. Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction. Approach suspected leak area with caution.

Prevention : Obtain special instructions before use. Wear protective gloves. Wear protective clothing. Wear eye or face protection. In case of inadequate ventilation wear respiratory protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe gas. Wash thoroughly after handling.

Response : Collect spillage. Leaking gas fire: Do not extinguish, unless leak can be stopped safely. In case of leakage, eliminate all ignition sources. IF exposed or concerned: Get medical advice or attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or doctor. Take off contaminated clothing and wash it before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice or attention.

Storage : Store locked up. Store in a well-ventilated place. Keep container tightly closed. Protect from sunlight.

Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations. Refer to manufacturer or supplier for information on recovery or recycling.

Hazards not otherwise classified : None known.

Section 3. Composition/information on ingredients

Substance/mixture : Substance

Chemical name : Methyl Bromide

Other means of identification : methylbromide; Methane, bromo-; Monobromomethane; halon-1001; Bromomthane; 1-Bromomethane; Methane monobrome; Methylium bromatum; Embafume; Mathane, bromo-; unsymmetrical dimethylhydrazine

Product code : 001035

CAS number/other identifiers

CAS number : 74-83-9

Ingredient name	%	CAS number
bromomethane	100	74-83-9

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Section 4. First aid measures

Inhalation : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion : As this product is a gas, refer to the inhalation section.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye irritation. Contact with rapidly expanding gas may cause burns or frostbite.

Inhalation : Fatal if inhaled. May cause respiratory irritation.

Skin contact : Causes skin irritation. Contact with rapidly expanding gas may cause burns or frostbite.

Frostbite : Try to warm up the frozen tissues and seek medical attention.

Ingestion : As this product is a gas, refer to the inhalation section.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:, pain or irritation, watering, redness

Inhalation : Adverse symptoms may include the following:, respiratory tract irritation, coughing

Skin contact : Adverse symptoms may include the following:, irritation, redness

Ingestion : No specific data.

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments : No specific treatment.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Section 5. Fire-fighting measures

Specific hazards arising from the chemical : Contains gas under pressure. Flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Gas may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back, causing fire or explosion. This material is very toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
halogenated compounds
carbonyl halides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources if safe to do so.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Accidental releases pose a serious fire or explosion hazard. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

Methods and materials for containment and cleaning up

Small spill : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.

Large spill : Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures : Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.
Use only non-sparking tools. Avoid release to the environment. Refer to special

Section 7. Handling and storage

instructions/safety data sheet. Empty containers retain product residue and can be hazardous. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Do not breathe gas. Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Eliminate all ignition sources. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F). Store locked up. Keep container tightly closed and sealed until ready for use. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
bromomethane	**ACGIH TLV (United States, 3/2019).** **Absorbed through skin.** TWA: 3.9 mg/m³ 8 hours. TWA: 1 ppm 8 hours. **OSHA PEL (United States, 5/2018).** **Absorbed through skin.** CEIL: 80 mg/m³ CEIL: 20 ppm **OSHA PEL 1989 (United States, 3/1989).** **Absorbed through skin.** TWA: 20 mg/m³ 8 hours. TWA: 5 ppm 8 hours.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Section 8. Exposure controls/personal protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state : Gas. [Compressed gas.]

Color : Colorless.

Odor : Odorless.

Odor threshold : Not available.

pH : Not available.

Melting point : -93.66°C (-136.6°F)

Boiling point : 3.5°C (38.3°F)

Critical temperature : 190.85°C (375.5°F)

Flash point : Not available.

Evaporation rate : Not available.

Flammability (solid, gas) : Not available.

Lower and upper explosive (flammable) limits : Lower: 13.5%
Upper: 16%

Vapor pressure : 27.7 (psia)

Vapor density : 3.3 (Air = 1)

Specific Volume (ft^3/lb) : 4.0323

Gas Density (lb/ft^3) : 0.248

Relative density : Not applicable.

Solubility : Not available.

Solubility in water : Not available.

Partition coefficient: n-octanol/water : 1.99

Auto-ignition temperature : 537°C (998.6°F)

Decomposition temperature : Not available.

Viscosity : Not applicable.

Flow time (ISO 2431) : Not available.

Molecular weight : 94.95 g/mole

Aerosol product

Heat of combustion : -7415288 J/kg

Section 10. Stability and reactivity

Reactivity : No specific test data related to reactivity available for this product or its ingredients.

Chemical stability : The product is stable.

Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow gas to accumulate in low or confined areas.

Incompatible materials : Oxidizers

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous polymerization : Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
bromomethane	LC50 Inhalation Gas.	Rat	850 ppm	1 hours

Irritation/Corrosion

Not available.

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
bromomethane	-	3	-

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
bromomethane	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Section 11. Toxicological information

Name	Category	Route of exposure	Target organs
bromomethane	Category 2	-	central nervous system (CNS), kidneys

Aspiration hazard

Not available.

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation. Contact with rapidly expanding gas may cause burns or frostbite.

Inhalation : Fatal if inhaled. May cause respiratory irritation.

Skin contact : Causes skin irritation. Contact with rapidly expanding gas may cause burns or frostbite.

Ingestion : As this product is a gas, refer to the inhalation section.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:, pain or irritation, watering, redness

Inhalation : Adverse symptoms may include the following:, respiratory tract irritation, coughing

Skin contact : Adverse symptoms may include the following:, irritation, redness

Ingestion : No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : May cause damage to organs through prolonged or repeated exposure.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : Suspected of causing genetic defects.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Inhalation (gases)	425 ppm

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
bromomethane	Acute EC50 1700 µg/l Fresh water Acute EC50 300 µg/l Fresh water	Daphnia - Daphnia magna Fish - Poecilia reticulata	48 hours 96 hours

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
bromomethane	1.99	-	low

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty Airgas-owned pressure vessels should be returned to Airgas. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.

United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS #	Status	Reference number
Methyl bromide; Methane, bromo-	74-83-9	Listed	U029

Section 14. Transport information

	DOT	TDG	Mexico	IMDG	IATA
UN number	UN1062	UN1062	UN1062	UN1062	UN1062
UN proper shipping name	METHYL BROMIDE	METHYL BROMIDE	Methyl Bromide	METHYL BROMIDE WITH NOT MORE THAN 2.0% CHLOROPICRIN	METHYL BROMIDE WITH NOT MORE THAN 2% CHLOROPICRIN
Transport hazard class(es)	2.3 	2.3 	2.3 (2.1) 	2.3 	2.3 
Packing group	-	-	-	-	-

Section 14. Transport information

Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes

"Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product."

Additional information

DOT Classification : Toxic - Inhalation hazard Zone C
This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a.
Reportable quantity 1000 lbs / 454 kg. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.
Limited quantity Yes.
Quantity limitation Passenger aircraft/rail: Forbidden. Cargo aircraft: Forbidden.
Special provisions 3, B14, T50, 153

TDG Classification : Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.13-2.17 (Class 2), 2.7 (Marine pollutant mark).
The marine pollutant mark is not required when transported by road or rail.
Explosive Limit and Limited Quantity Index 0
ERAP Index 25
Passenger Carrying Vessel Index Forbidden

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

IATA : The environmentally hazardous substance mark may appear if required by other transportation regulations.
Quantity limitation Passenger and Cargo Aircraft: Forbidden. Cargo Aircraft Only: Forbidden.

Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

U.S. Federal regulations : **TSCA 8(a) CDR Exempt/Partial exemption**: Not determined
Clean Water Act (CWA) 307: Methyl Bromide

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

Section 15. Regulatory information

Name	%	EHS	SARA 302 TPQ		SARA 304 RQ	
			(lbs)	(gallons)	(lbs)	(gallons)
bromomethane	100	Yes.	1000	-	1000	-

SARA 304 RQ : 1000 lbs / 454 kg

SARA 311/312

Classification : Refer to Section 2: Hazards Identification of this SDS for classification of substance.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Methyl Bromide	74-83-9	100
Supplier notification	Methyl Bromide	74-83-9	100

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : This material is listed.

New York : This material is listed.

New Jersey : This material is listed.

Pennsylvania : This material is listed.

California Prop. 65

⚠ **WARNING**: This product can expose you to Methyl bromide, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Ingredient name	No significant risk level	Maximum acceptable dosage level
Methyl bromide	-	Yes.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Ingredient name	Status
methyl bromide	Annex E, Group I

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : This material is listed or exempted.

Canada : This material is listed or exempted.

China : This material is listed or exempted.

Europe : This material is listed or exempted.

Japan : **Japan inventory (ENCS)**: This material is listed or exempted.
Japan inventory (ISHL): This material is listed or exempted.

New Zealand : This material is listed or exempted.

Section 15. Regulatory information

Philippines : This material is listed or exempted.

Republic of Korea : This material is listed or exempted.

Taiwan : This material is listed or exempted.

Thailand : Not determined.

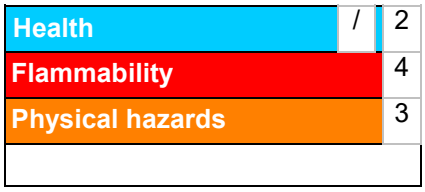
Turkey : Not determined.

United States : This material is active or exempted.

Viet Nam : This material is listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)

Reprinted with permission from NFPA 704-2001, Identification of the Hazards of Materials for Emergency Response Copyright ©1997, National Fire Protection Association, Quincy, MA 02269. This reprinted material is not the complete and official position of the National Fire Protection Association, on the referenced subject which is represented only by the standard in its entirety.

Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

Procedure used to derive the classification

Classification	Justification
FLAMMABLE GASES - Category 2	On basis of test data
GASES UNDER PRESSURE - Compressed gas	According to package
ACUTE TOXICITY (inhalation) - Category 2	On basis of test data
SKIN IRRITATION - Category 2	Expert judgment
EYE IRRITATION - Category 2A	Expert judgment
GERM CELL MUTAGENICITY - Category 2	Expert judgment
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3	Expert judgment
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Expert judgment
AQUATIC HAZARD (ACUTE) - Category 1	On basis of test data
AQUATIC HAZARD (LONG-TERM) - Category 1	Expert judgment
HAZARDOUS TO THE OZONE LAYER - Category 1	Expert judgment

History

Date of printing : 11/5/2020

: 11/5/2020

Section 16. Other information

Date of issue/Date of revision

Date of previous issue : 11/5/2020

Version : 1.02

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN = United Nations

References : Not available.

Other special considerations : WARNING: Contains (Methyl bromide), a substance which harms the public health and environment by destroying ozone in the upper atmosphere.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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]
S01	EP01	Shipping containers of logs or piles of logs covered with Tarpaulins	2023	10 containers per treatment cycle or equivalent volume piles	December 2023	None

[1] For Emission Units (or Sources) use the following numbering system:1S, 2S, 3S,... or other appropriate designation.
[2] For Emission Points use the following numbering system:1E, 2E, 3E, ... or other appropriate designation.
[3] 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			
EP01	Vertical Opening	S01	Shipping container	None	NA	24 hrs per treatment cycle	1,248	Methyl bromide	15.3	9.55	NA	NA	Gas/vapor	MB	

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, etc. **DO NOT LIST** CO_2, 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 Emissions Units Table)*	Inner Diameter (ft.)	Exit Gas			Emission Point Elevation (ft)		UTM Coordinates (km)	
		Temp. (°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
EP01		Ambient			2115	30	4329.966	689.438

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

ATTACHMENT L
EMISSIONS UNIT DATA SHEETS

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: Log fumigation operation
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: 540,000 lbs of logs and 367 pounds of methyl bromide each treatment cycle
4. Name(s) and maximum amount of proposed material(s) produced per hour: 540,000 pounds of treated logs per treatment cycle
5. Give chemical reactions, if applicable, that will be involved in the generation of air pollutants: None

* 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:

Not applicable

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

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

@ °F and psia.

(d) Percent excess air:

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

(f) If coal is proposed as a source of fuel, identify supplier and seams and give sizing of the coal as it will be fired:

(g) Proposed maximum design heat input: × 10^6 BTU/hr.

7. Projected operating schedule:

Hours/Day	24	Days/Week	7	Weeks/Year	52

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

@ °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)		
	methyl bromide	15.3 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	RECORDKEEPING
Monitoring in accordance with USDA APHIS protocols	Recordkeeping in accordance with USDA APHIS protocols
REPORTING	**TESTING**
None proposed	None proposed

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

NA

ATTACHMENT N
SUPPORTING EMISSIONS CALCULATIONS

ATTACHMENT N
SUPPORTING EMISSIONS CALCULATIONS

ATTACHMENT N - Supporting Emissions Calculatior

APHIS Treatment Schedule Requirements

Methyl Bromide Dosage Rate =	15	lb/1000 cf of oak logs
Percentage of Oak Logs Fumigated =	80	%
Methyl Bromide Dosage Rate =	7.5	lb/1000 cf of non-oak logs
Percentage of Non-Oak Logs Fumigated=	20	%

Minimum Methyl Bromide Exposure for Oak Logs =	72	hours
Minimum Methyl Bromide Vent Time for Oak Logs =	24	hours
Total Cycle Time (Exposure plus Vent Time) =	96	hours

Volume of the Treatment Chamber(s)	2720	cubic feet
Number of Chambers Treated per Cycle	10	
Maximum number of oak log containers =	8	

Usage: 15lb/1000 cf x 80.%) + (7.5 lb/1000 x 20.%) x 10 treatment chambers x 2720 cubic feet
(15 lb/1000 cf x 80%) + (7.5 lb/1000 x 20%) x 10 containers x 2720 cf =

Usage: **367.2** lbs of Methyl Bromide per treatment cycle

367.2	lb MB per treatment cycle / 96 hours per cycle =		3.825
367.2	lb MB per treatment cycle / 24 hours to vent =		15.3

367.2 MB/treatment cycle x 1 treatment cycle/week x 52 weeks =

19,094 **lbs Methyl Bromide per year**
9.5472 **tons Methyl Bromide per year**

ATTACHMENT N
SUPPORTING EMISSIONS CALCULATIONS

ıs

t =

lb/hr over entire cycle
lb/hr per cycle vent time

ATTACHMENT P
PUBLIC NOTICE

Attachment P

AIR QUALITY PERMIT NOTICE
Notice of Application

Notice is given that Allegheny Wood Products, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Construction Permit for a log fumigation operation located at 148 Park Farm Dr, in Baker, in Hardy County, West Virginia. The latitude and longitude coordinates are: 39.098269 degrees north latitude and -78.809367 degrees west longitude.

The applicant estimates the potential to discharge the following Regulated Air Pollutants will be: 9.55 tons per year of methyl bromide.

Startup of operation is planned to begin on or about the 12th day of December, 2023. 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 11th day of January, 2023.

By: Allegheny Wood Products, Inc.
Kelly Riddle
Vice President Forest Resources
P.O. Box 867
Petersburg, WV 26847

APPLICATION FEE
Will be Mailed
Separately